



Incident ID: nAPP2425876097

## Release Assessment and Closure

Riverbend 12-13 Federal Com 20H  
Section 01, Township 25 South, Range 28 East  
Coordinates: 32.15531, -104.04163  
County: Eddy  
Vertex File Number: 24E-04393

**Prepared for:**  
Coterra Energy Operating Company

**Prepared by:**  
Vertex Resource Services Inc.

**Date:**  
December 2025

**Coterra Energy Operating Company**  
Riverbend 12-13 Federal Com 20H


**Release Assessment and Closure**  
December 2025

**Release Assessment and Closure**  
**Riverbend 12-13 Federal Com 20H**  
**Section 01, Township 25 South, Range 28 East**  
**Coordinates: 32.15531, -104.04163**  
**County: Eddy**


Prepared for:  
**Coterra Energy Operating Company**  
7101 Norris Road  
Carlsbad, New Mexico 88220

**New Mexico Oil Conservation Division**  
508 West Texas Avenue  
Hobbs, New Mexico 88240

Prepared by:  
**Vertex Resource Services Inc.**  
3101 Boyd Drive  
Carlsbad, New Mexico 88220

  
\_\_\_\_\_  
Gilberto Sanchez, B. Sc.  
ENVIRONMENTAL FIELD TECHNICIAN, REPORTING

12/31/2025  
\_\_\_\_\_  
Date

  
\_\_\_\_\_  
Chad Hensley, B.Sc., GCNR  
SENIOR PROJECT MANAGER, REPORT REVIEW

12/31/2025  
\_\_\_\_\_  
Date

## Table of Contents

1.0 Introduction .....	1
2.0 Incident Description .....	1
3.0 Site Characteristics .....	1
4.0 Closure Criteria Determination .....	2
5.0 Remedial Actions Taken.....	4
5.1 Variance Request.....	5
6.0 Closure Request.....	5
7.0 References .....	6
8.0 Limitations .....	7

### **In-text Tables**

- Table 1. Closure Criteria Determination
- Table 2. Closure Criteria for Soils Impacted by a Release DTGW  $\leq 50$  feet bgs

### **List of Figures**

- Figure 1. Characterization Schematic
- Figure 2. Confirmation Schematic - Overview
- Figure 3a. Confirmation Schematic - West Excavation
- Figure 3b. Confirmation Schematic - East Excavation

### **List of Tables**

- Table 3. Initial Characterization Sample and Laboratory Results – Depth to Groundwater  $\leq 50$  feet bgs
- Table 4. Confirmation Sample and Laboratory Results – Depth to Groundwater  $\leq 50$  feet bgs

### **List of Appendices**

- Appendix A. Closure Criteria Research Documentation
- Appendix B. Daily Field and Sampling Reports
- Appendix C. Laboratory Data Reports and Chain of Custody Forms
- Appendix D. Variance

## 1.0 Introduction

Coterra Energy Operating Company (Coterra), also affiliated under Cimarex Energy Co., retained Vertex Resource Services Inc. (Vertex) to conduct a Release Assessment and Closure for release that occurred on September 14, 2024, at Riverbend 12-13 Federal Com 20H, Coordinates: 32.15531, -104.04163 (hereafter referred to as the "site"). Coterra submitted an initial C-141 Release Notification to New Mexico Oil Conservation Division (NMOCD) on September 17, 2024. Incident ID number nAPP2425876097 was assigned to this incident.

This report provides a description of the release assessment and remediation activities associated with the site. The information presented demonstrates that closure criteria established in Table I of 19.15.29.12 of the *New Mexico Administrative Code* (NMAC; New Mexico Oil Conservation Division, 2018) related to NMOCD has been met and all applicable regulations are being followed. This document is intended to serve as a final report to obtain approval from NMOCD for closure of this release, with the understanding that restoration of the release site will be deferred until such time as all oil and gas activities are terminated and the site is reclaimed as per NMAC 19.15.29.13.

## 2.0 Incident Description

The release occurred on September 14, 2024, due to human error during operations when a siphon hose fell out of a brine tank and released brine water onto the pad. The incident was reported by Notice of Release on September 14, 2024, and involved the release of approximately 11 barrels (bbl) of produced water onto the production pad. Approximately 4 bbl of free fluid was removed during the initial clean up. Additional details relevant to the release are presented in the C-141 Report.

## 3.0 Site Characteristics

The site is located approximately 5 miles southeast of Malaga, New Mexico. The legal location for the site is Section 01, Township 25 South and Range 28 East in Eddy County, New Mexico. The release area is located Federal land. An aerial photograph and site schematic are presented on Figure 1.

*The Geological Map of New Mexico* (New Mexico Bureau of Geology and Mineral Resources, 2025) indicates the site's surface geology primarily comprises Qoa, Older alluvial deposits of upland plains and piedmont areas. Predominant soil texture on the site is loamy. Additional soil characteristics include a drainage class of well drained with a runoff class of high. The karst geology potential for the site is high (United States Department of the Interior, Bureau of Land Management, 2018).

The location is typical of oil and gas exploration and production sites in the Permian Basin and is currently used for oil and gas production and storage. The following sections specifically describe the release area on the constructed pad. (Figure 1).

The surrounding landscape is associated with dunes with elevations ranging between 2,842 to 5,000 feet. The climate is semiarid with average annual precipitation ranging between 8 and 14 inches. Using information from the United States Department of Agriculture, this loamy site is associated with Gyp Upland, gravelly and shallow sites (United States Department of Agriculture, Natural Resources Conservation Service, 2025). Historically, grasses such as alkali sacaton

along the interfacing of the associated sites and tobosa, black and blue grammas. Shrubs and half shrubs such as creosote and mesquites were observed to grow near the production pad. Limited to no vegetation is allowed to grow on the compacted production pad, right-of-way and access road.

#### 4.0 Closure Criteria Determination

The nearest active well to the site is a New Mexico Office of the State Engineer (NMOSE) irrigation well (C-01880) located approximately 1.15 miles northeast of the site (New Mexico Office of the State Engineer, 2025a) and (C-04493) located approximately 1.5 miles east of the site. Data from 1979 shows the NMOSE C-01880 borehole recorded a depth to groundwater of 40 feet below ground surface (bgs). Data from 2020 shows the NMOSE C-04493 borehole recorded a depth to groundwater of 37 feet bgs.

Information pertaining to the depth to ground water determination is included in Appendix A.

There is no surface water present at the site. The nearest significant watercourse, as defined in Subsection P of 19.15.17.7 NMAC, is the Pecos River located 0.72 miles east of the site (United States Fish and Wildlife Service, 2025).

At the site, there are no other continuously flowing watercourses or significant watercourses, lakebeds, sinkholes, playa lakes or other critical water or community features as outlined in Paragraph (4) of Subsection C of 19.15.29.12 NMAC.

Coterra Energy Operating Company  
Riverbend 12-13 Federal Com 20H

Release Assessment and Closure  
December 2025

<b>Table 1. Closure Criteria Determination</b>			
<b>Site Name: Riverbend 12-13 Federal Com 20H</b>			
<b>Release Coordinates: 32.15531, -104.04163</b>		X: 602022	Y: 3551140
<b>Site Specific Conditions</b>		<b>Value</b>	<b>Unit</b>
1	Depth to Groundwater (nearest reference)	40	feet
	Depth to additional Groundwater (nearest reference)	37	feet
	Distance between release and nearest DTGW reference	6,074	feet
	Distance between release and nearest additional DTGW reference	7,890	feet
	Date of nearest DTGW reference measurement	October 30, 1979	
	Date of additional nearest DTGW reference measurement	November 18, 2020	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	3,792	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	2,798	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	15,269	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	6,074	feet
	ii) Within 1000 feet of any fresh water well or spring	15,269	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	2,798	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	17,846	feet
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
	Distance between release and nearest unstable area	Zero Feet - Overlying - or Within Area	
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	2,376	feet
11	Soil Type	Russler loam, 1 to 3 percent slopes	
12	Ecological Classification	Loamy	
13	Geology	Qoa- Older alluvial deposits of upland plains and piedmont areas	
	<b>NMAC 19.15.29.12 E (Table 1) Closure Criteria</b>	<50'	<50' 51-100' >100'

The closure criteria determined for the site are associated with the following constituent concentration limits as presented in Table 2.

**Table 2. Closure Criteria for Soils Impacted by a Release DTGW ≤ 50 feet bgs**

Minimum depth below any point within the horizontal boundary of the release to groundwater less than 10,000 mg/l TDS	Constituent	Limit
≤ 50 feet	Chloride	600 mg/kg
	TPH (GRO+DRO+MRO)	100 mg/kg
	BTEX	50 mg/kg
	Benzene	10 mg/kg

DTGW – Depth to ground water

bgs – Below ground surface

TDS – total dissolved solids

TPH – total petroleum hydrocarbons, GRO – gas range organics, DRO – diesel range organics, MRO – motor oil range organics

BTEX – benzene, toluene, ethylbenzene and xylenes

### 5.0 Remedial Actions Taken

An initial site assessment of the release area was completed on October 3, 2025, which identified the area of the release specified in the initial C-141 Report and estimated the approximate volume of the release. A total of nine test pit sample points (TT24) were established and 27 samples sent to Envirotech, Farmington, New Mexico. The sample locations are presented on Figure 1. The laboratory results are presented in Table 3. The Daily Field Report associated with the site inspection is included in Appendix B and laboratory data reports are included in Appendix C.

Remediation efforts began on September 9, 2025, and were finalized on November 21, 2025. Vertex personnel supervised the excavation of impacted soils. Field screening was completed on a total of 163 sample points and consisted of analysis using a Photo Ionization Detector (volatile hydrocarbons), Dextsil Petroflag using EPA SW-846 Method 9074 (extractable hydrocarbons) and silver nitrate titration (chlorides). Field screening results were used to identify areas requiring further remediation. Soils were removed to a depth of 1 to 17 feet bgs. Impacted soil was transported by a licensed waste hauler and disposed of at an approved waste management facility as stipulated by the Form C-138 Request for Approval to Accept Solid Waste. The excavation overview is presented on Figure 2. The Daily Field Reports documenting various phases of the remediation are presented in Appendix B.

Notification that confirmatory samples were being collected was provided to the NMOCD on October 23 and 29, November 5, 13, and 17, 2025. Confirmatory composite samples were collected from the base and walls of the excavation in 200 square foot increments. Approximately 16,536 square feet in total surface area and 4, 835 cubic yards of total volume were remediated. A total of 164 samples were collected for laboratory analysis following NMOCD soil sampling procedures. Samples were submitted to Cardinal Laboratory under chain-of-custody protocols and analyzed for BTEX (EPA Method 8021B), total petroleum hydrocarbons (GRO, DRO, MRO – EPA Method 8015D) and total chlorides (EPA Method 300.0).

Of the 164 samples collected, one sample exceeded site criteria. On November 17, 2025, Vertex personnel supervised excavation in this area of exceedance. Samples following excavation were collected on November 17, 2025, and sent to Cardinal Laboratory. All confirmatory samples collected and analyzed were below closure criteria for the site and sample locations are presented on Figures 3a and 3b. The laboratory results are presented in Table 4 and laboratory data reports are included in Appendix C.

### 5.1 Variance Request

Of the 164 samples collected, 93 samples were collected without proper sample notifications due to communication errors. The sampling notifications for October 24, November 5 and 6, 2025, were submitted on October 23 and November 5, 2025.

On December 16, 2025, Vertex on behalf of Coterra, requested a variance be granted for the affected confirmation samples. Notifications and the request are included in Appendix D. Laboratory results are presented in Table 4.

### 6.0 Closure Request

The release area was fully delineated, remediated, and backfilled with local soils by December 10, 2025. Confirmatory samples were analyzed by the laboratory and found to be below allowable concentrations as per the NMAC Closure Criteria for Soils Impacted by a Release location “under 50 feet to groundwater”. Based on these findings Coterra requests that this release be closed.

Should you have any questions or concerns, please do not hesitate to contact Chad Hensley at 575.200.6167 or [chensley@vertexresource.com](mailto:chensley@vertexresource.com)

## 7.0 References

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- United States Geological Survey. (2025). *National Water Information System: Web Interface*. Retrieved from <https://waterdata.usgs.gov/nwis>

## **8.0 Limitations**

This report has been prepared for the sole benefit of Coterra Energy Operating Company. This document may not be used by any other person or entity, with the exception of the New Mexico Oil Conservation Division and the Bureau of Land Management Office, without the express written consent of Vertex Resource Services Inc. and Coterra Energy Operating Company. Any use of this report by a third party, or any reliance on decisions made based on it, or damages suffered as a result of the use of this report are the sole responsibility of the user.

The information and conclusions contained in this report are based upon work undertaken by trained professional and technical staff in accordance with generally accepted scientific practices current at the time the work was performed. The conclusions and recommendations presented represent the best judgement of Vertex based on the data collected during the assessment. Due to the nature of the assessment and the data available, Vertex cannot warrant against undiscovered environmental liabilities. Conclusions and recommendations presented in this report should not be considered legal advice.

## FIGURES



Trench Sample (Prefixed by "TT24-")
  Approximate Release Extent (~7,850 ft<sup>2</sup>.)



0 25 50 ft.  
 NAD 1983 UTM Zone 13N  
 Date: Dec 18/25

Map Center:  
 Lat: 32.155501°N,  
 Long: 104.041892°W



**Characterization Schematic**  
**Riverbend 12-13 Federal Com 20H**

FIGURE:  
**1**



Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

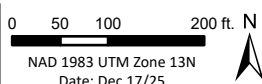
Note: Georeferenced image from Esri, 2024. Site features from GPS by Vertex Professional Services Ltd., 2025.

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- |   |  |  |
|---|--|--|
| Excavation to 3' bgs (~2,116 ft <sup>2</sup>   180 ft.)       | West Excavation to 4' bgs (~408 ft <sup>2</sup>   82 ft.)    | Excavation to 9' bgs (~1,410 ft <sup>2</sup>   207 ft.)    |
| Central Excavation to 4' bgs (~447 ft <sup>2</sup>   113 ft.) | Excavation to 5.5' bgs (~1,013 ft <sup>2</sup>   162 ft.)    | Excavation to 10' bgs (~1,450 ft <sup>2</sup>   155 ft.)   |
| North Excavation to 4' bgs (~127 ft <sup>2</sup>   87 ft.)    | Excavation to 6' bgs (~2,315 ft <sup>2</sup>   200 ft.)      | Excavation to 14' bgs (~2,761 ft <sup>2</sup>   1,452 ft.) |
| South Excavation to 4' bgs (~190 ft <sup>2</sup>   78 ft.)    | West Excavation to 7' bgs (~3,887 ft <sup>2</sup>   250 ft.) | Excavation to 17' bgs (~412 ft <sup>2</sup>   84 ft.)      |



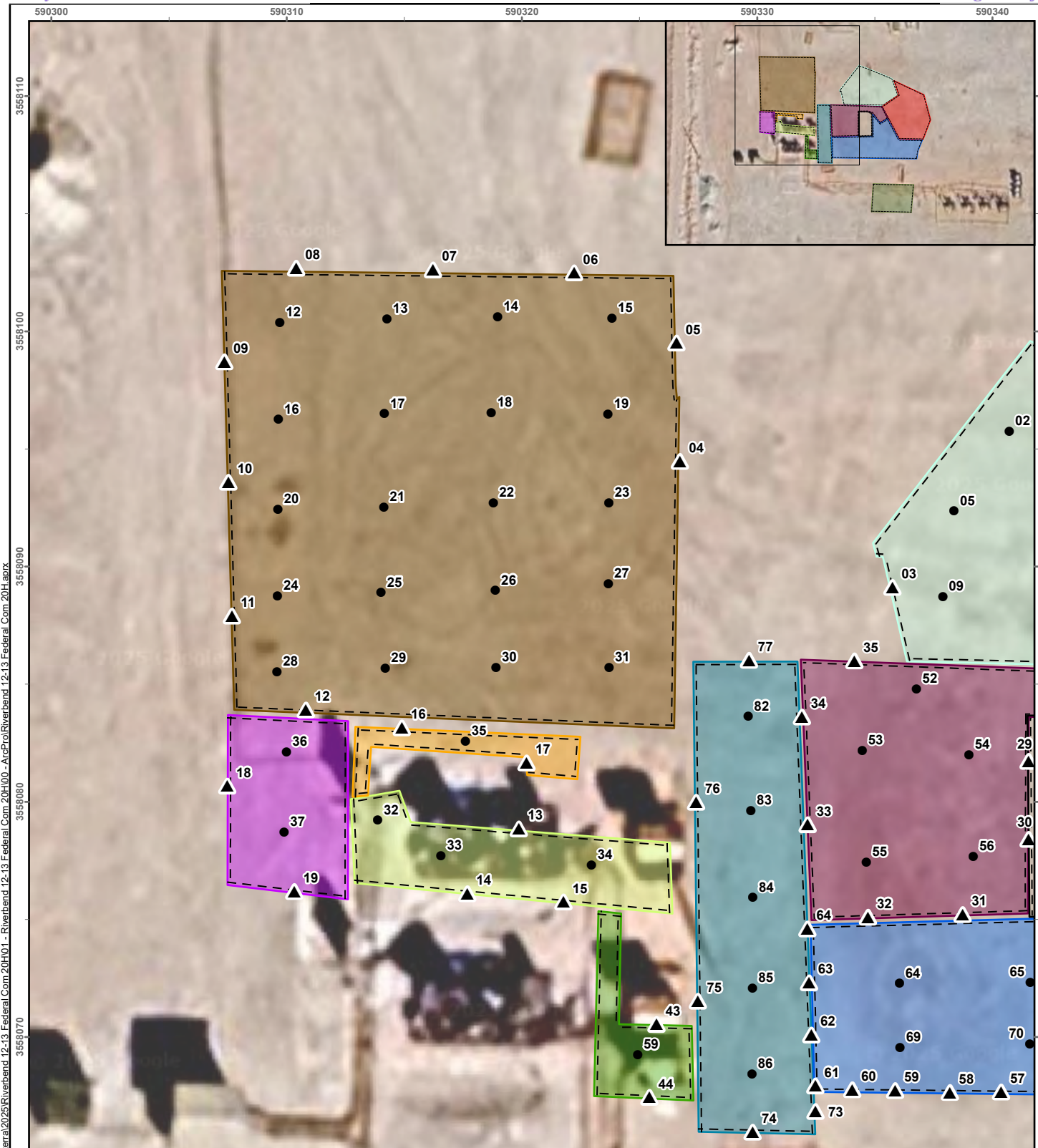
**Confirmation Schematic - Overview  
Riverbend 12-13 Federal Com 20H**

FIGURE:  
**2**



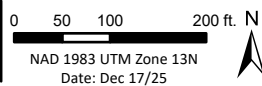
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Note: Georeferenced image from Esri, 2024. Site features from GPS by VPS, 2025.



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- Base Sample (Prefixed by "BS25-")
- ▲ Wall Sample (Prefixed by "WS25-")
- ⊕ Excavation to 3' bgs (~2,116 ft<sup>2</sup> | 180 ft.)
- ⊕ Central Excavation to 4' bgs (~447 ft<sup>2</sup> | 113 ft.)
- ⊕ North Excavation to 4' bgs (~127 ft<sup>2</sup> | 87 ft.)
- ⊕ South Excavation to 4' bgs (~190 ft<sup>2</sup> | 78 ft.)
- ⊕ West Excavation to 4' bgs (~408 ft<sup>2</sup> | 82 ft.)
- ⊕ Excavation to 5.5' bgs (~1,013 ft<sup>2</sup> | 162 ft.)
- ⊕ West Excavation to 7' bgs (~3,887 ft<sup>2</sup> | 250 ft.)
- ⊕ Excavation to 9' bgs (~1,410 ft<sup>2</sup> | 207 ft.)
- ⊕ Excavation to 14' bgs (~2,761 ft<sup>2</sup> | 1,452 ft.)
- ⊕ Excavation to 17' bgs (~412 ft<sup>2</sup> | 84 ft.)

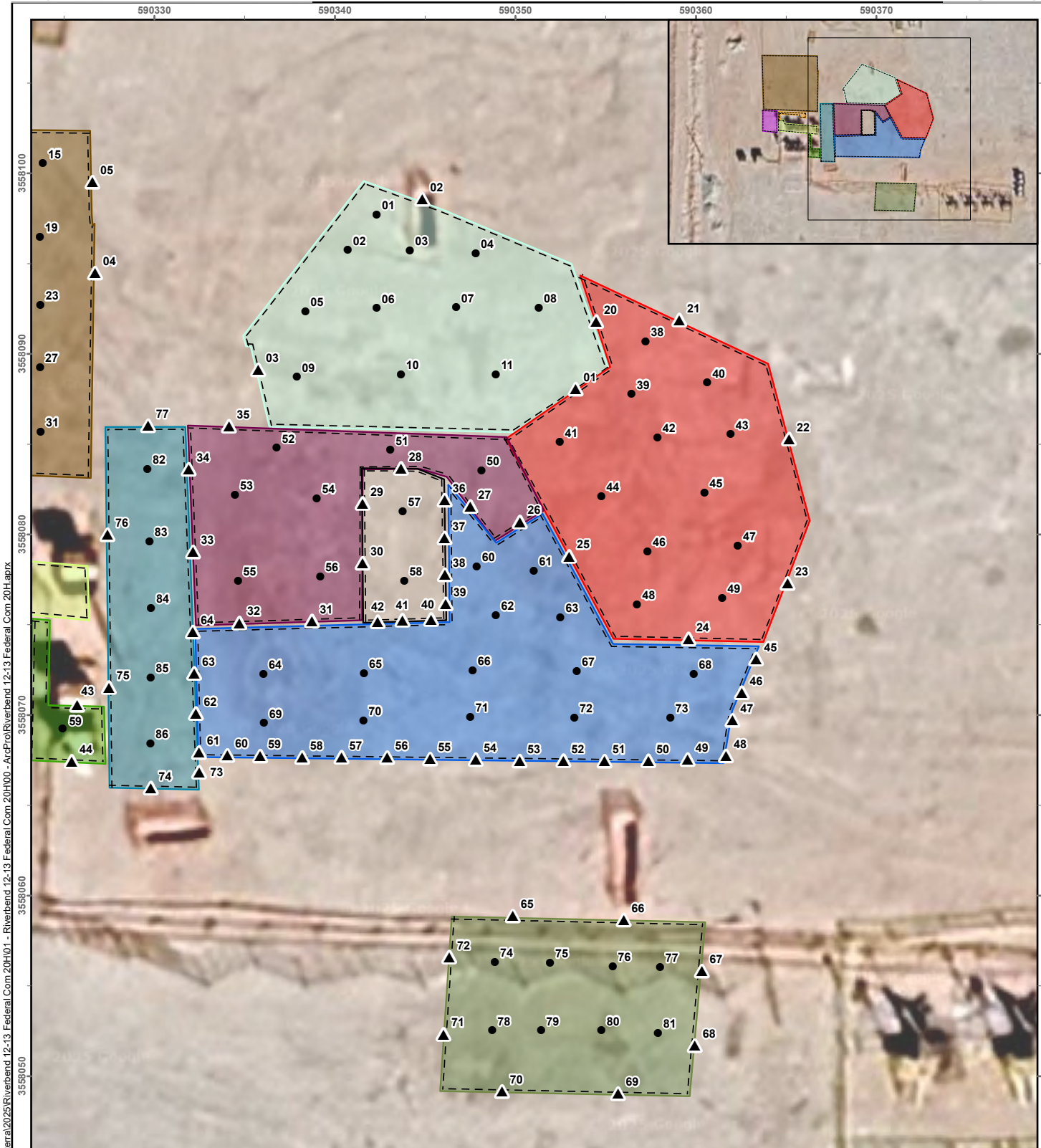


**Confirmation Schematic - West Excavation  
Riverbend 12-13 Federal Com 20H**

FIGURE: **3a**


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Note: Georeferenced image from Esri, 2024. Site features from GPS by VPS, 2025.




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- Base Sample (Prefixed by "BS25-")
- ▲ Wall Sample (Prefixed by "WS25-")
- Excavation to 3' bgs (~2,116 ft<sup>2</sup>. | 180 ft.)
- Central Excavation to 4' bgs (~447 ft<sup>2</sup>. | 113 ft.)
- South Excavation to 4' bgs (~190 ft<sup>2</sup>. | 78 ft.)
- Excavation to 5.5' bgs (~1,013 ft<sup>2</sup>. | 162 ft.)
- Excavation to 6' bgs (~2,315 ft<sup>2</sup>. | 200 ft.)
- West Excavation to 7' bgs (~3,887 ft<sup>2</sup>. | 250 ft.)
- Excavation to 9' bgs (~1,410 ft<sup>2</sup>. | 207 ft.)
- Excavation to 10' bgs (~1,450 ft<sup>2</sup>. | 155 ft.)
- Excavation to 14' bgs (~2,761 ft<sup>2</sup>. | 1,452 ft.)
- Excavation to 17' bgs (~412 ft<sup>2</sup>. | 84 ft.)




NAD 1983 UTM Zone 13N  
Date: Dec 17/25

0 50 100 200 ft. N



**Confirmation Schematic - East Excavation**  
**Riverbend 12-13 Federal Com 20H**

FIGURE:  
**3b** 

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes. Note: Georeferenced image from Esri, 2024. Site features from GPS by VPS, 2025.

## **TABLES**

Client Name: Coterra Energy Operating Company  
 Site Name: Riverbend 12-13 Federal Com 20H  
 NM OCD Tracking #: NAPP2425876097  
 Project #: 24E-04393  
 Lab Report: E410057

Table 3. Initial Characterization Sample and Laboratory Results										
Sample Description			Petroleum Hydrocarbons							Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable					Chloride Concentration
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MIRO)	(GRO + DRO)	Total Petroleum Hydrocarbons (TPH)	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Depth to Groundwater <50 feet bgs										
TT24-01	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
TT24-02	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>2,010</b>
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
TT24-03	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>7,120</b>
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>5,090</b>
	4	October 4, 2024	ND	ND	ND	63.1	ND	63.1	63.1	<b>3,400</b>
	6	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>922</b>
	8	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	398
TT24-04	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	259
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	279
TT24-05	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>7,510</b>
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>7,020</b>
	4	October 4, 2024	ND	ND	ND	57.4	65.3	57.4	<b>122.7</b>	<b>3,340</b>
	6	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>3,350</b>
	8	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>630</b>
TT24-06	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>5,730</b>
	2	October 4, 2024	ND	ND	ND	59.6	69.7	59.6	<b>129.3</b>	<b>8,280</b>
	4	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>8,020</b>
	6	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>4,780</b>
	8	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>890</b>
TT24-07	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>1,420</b>
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND
TT24-08	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>3730</b>
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	<b>1030</b>
TT24-09	1	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	130
	2	October 4, 2024	ND	ND	ND	ND	ND	ND	ND	ND

"ND" Not Detected at the Reporting Limit

**Bold and Yellow shaded indicates exceedance outside of NM OCD Closure Criteria**



Client Name: Coterra Energy Operating Company  
 Site Name: Riverbend 12-13 Federal Com 20H  
 NM OCD Tracking #: NAPP2425876097  
 Project #: 24E-04393  
 Lab Report: H256765, H256909, H257055, H257371 and H257378

**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable				Chloride Concentration
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)	
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	
Depth to Groundwater <50 feet bgs									
BS25-01*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-02*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-03*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-04*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-05*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	64
BS25-06*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-07*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-08*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-09*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-10*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	64
BS25-11*	3	October 24, 2025	ND	ND	ND	ND	ND	ND	80
BS25-12*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	64
BS25-13*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-14*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-15*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-16*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-17*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-18*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-19*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-20*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-21*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-22*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-23*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-24*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-25*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-26*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
BS25-27*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-28*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-29*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-30*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	32



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**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable				Chloride Concentration (mg/kg)
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	
BS25-31*	7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
BS25-32*	4	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-33*	4	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-34*	4	October 24, 2025	ND	ND	ND	ND	ND	ND	64
BS25-35*	4	October 24, 2025	ND	ND	ND	ND	ND	ND	32
BS25-36	4	October 31, 2025	ND	ND	ND	ND	ND	ND	32
BS25-37	4	October 31, 2025	ND	ND	ND	ND	ND	ND	16
BS25-38	6	October 31, 2025	ND	ND	ND	ND	ND	ND	16
BS25-39	6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
BS25-40	6	October 31, 2025	ND	ND	ND	ND	ND	ND	64
BS25-41	6	October 31, 2025	ND	ND	ND	ND	ND	ND	64
BS25-42	6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
BS25-43	6	October 31, 2025	ND	ND	ND	ND	ND	ND	80
BS25-44	6	October 31, 2025	ND	ND	ND	ND	ND	ND	16
BS25-45	6	October 31, 2025	ND	ND	ND	ND	ND	ND	16
BS25-46	6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
BS25-47	6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
BS25-48	6	October 31, 2025	ND	ND	ND	ND	ND	ND	96
BS25-49	6	October 31, 2025	ND	ND	ND	ND	ND	ND	128
BS25-50	9	November 6, 2025	ND	ND	ND	ND	ND	ND	768
	9.5	November 17, 2025	ND	ND	ND	ND	ND	ND	128
BS25-51*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	48
BS25-52*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-53*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	96
BS25-54*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-55*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-56*	9	November 6, 2025	ND	ND	ND	ND	ND	ND	32
BS25-57*	17	November 6, 2025	ND	ND	ND	ND	ND	ND	96
BS25-58*	17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-59*	4	November 5, 2025	ND	ND	ND	ND	ND	ND	80
BS25-60	14	November 7, 2025	ND	ND	ND	ND	ND	ND	112
BS25-61	14	November 7, 2025	ND	ND	ND	ND	ND	ND	128



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**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable				
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
Depth to Groundwater <50 feet bgs									
BS25-62	14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
BS25-63	14	November 7, 2025	ND	ND	ND	ND	ND	ND	192
BS25-64	14	November 7, 2025	ND	ND	ND	ND	ND	ND	176
BS25-65	14	November 7, 2025	ND	ND	ND	ND	ND	ND	144
BS25-66	14	November 7, 2025	ND	ND	ND	ND	ND	ND	112
BS25-67	14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
BS25-68	14	November 7, 2025	ND	ND	ND	ND	ND	ND	112
BS25-69	14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
BS25-70	14	November 7, 2025	ND	ND	ND	ND	ND	ND	144
BS25-71	14	November 7, 2025	ND	ND	ND	ND	ND	ND	80
BS25-72	14	November 7, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-73	14	November 7, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-74*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-75*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-76*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
BS25-77*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	144
BS25-78*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	160
BS25-79*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	160
BS25-80*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	160
BS25-81*	10	November 5, 2025	ND	ND	ND	ND	ND	ND	144
BS25-82	5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	160
BS25-83	5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	144
BS25-84	5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	208
BS25-85	5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	144
BS25-86	5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	144
WS25-01	0-3	October 31, 2025	ND	ND	ND	ND	ND	ND	80
WS25-02*	0-3	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-03	0-3	October 31, 2025	ND	ND	ND	ND	ND	ND	80
WS25-04*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	16
WS25-05*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-06*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	48



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**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable				
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)	Total Petroleum Hydrocarbons (TPH)	Chloride Concentration
Depth to Groundwater <50 feet bgs									
WS25-07*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-08*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-09*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-10*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	32
WS25-11*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
WS25-12*	0-7	October 24, 2025	ND	ND	ND	ND	ND	ND	48
WS25-13*	0-4	October 24, 2025	ND	ND	ND	ND	ND	ND	64
WS25-14*	0-4	October 24, 2025	ND	ND	ND	ND	ND	ND	80
WS25-15*	0-4	October 24, 2025	ND	ND	ND	ND	ND	ND	48
WS25-16*	0-4	October 24, 2025	ND	ND	ND	ND	ND	ND	96
WS25-17*	0-4	October 24, 2025	ND	ND	ND	ND	ND	ND	48
WS25-18	0-4	October 31, 2025	ND	ND	ND	ND	ND	ND	80
WS25-19	0-4	October 31, 2025	ND	ND	ND	ND	ND	ND	80
WS25-20	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	96
WS25-21	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	64
WS25-22	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	64
WS25-23	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
WS25-24	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
WS25-25	0-6	October 31, 2025	ND	ND	ND	ND	ND	ND	32
WS25-26*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	96
WS25-27*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	32
WS25-28*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-29*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-30*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-31*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	80
WS25-32*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-33*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-34*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	80
WS25-35*	0-9	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-36*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-37*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-38*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND



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**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable				
			Benzene (mg/kg)	BTEX (Total) (mg/kg)	Gasoline Range Organics (GRO) (mg/kg)	Diesel Range Organics (DRO) (mg/kg)	Motor Oil Range Organics (MRO) (mg/kg)	Total Petroleum Hydrocarbons (TPH) (mg/kg)	Chloride Concentration (mg/kg)
Depth to Groundwater <50 feet bgs									
WS25-39*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-40*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	96
WS25-41*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-42*	0-17	November 6, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-43*	0-4	November 5, 2025	ND	ND	ND	ND	ND	ND	64
WS25-44*	0-4	November 5, 2025	ND	ND	ND	ND	ND	ND	80
WS25-45	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
WS25-46	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	80
WS25-47	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	128
WS25-48	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-49	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	32
WS25-50	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	16
WS25-51	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-52	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	112
WS25-53	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	32
WS25-54	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	16
WS25-55	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-56	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	32
WS25-57	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	16
WS25-58	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	112
WS25-59	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	128
WS25-60	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
WS25-61	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
WS25-62	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	128
WS25-63	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	16
WS25-64	0-14	November 7, 2025	ND	ND	ND	ND	ND	ND	96
WS25-65*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	16
WS25-66*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	32
WS25-67*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	16
WS25-68*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	32
WS25-69*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-70*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND



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**Table 4. Confirmation Sample and Laboratory Results**

Sample Description			Petroleum Hydrocarbons						Inorganic
Sample ID	Depth (ft)	Sample Date	Volatile		Extractable			Chloride Concentration	
			Benzene	BTEX (Total)	Gasoline Range Organics (GRO)	Diesel Range Organics (DRO)	Motor Oil Range Organics (MRO)		Total Petroleum Hydrocarbons (TPH)
			(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)		(mg/kg)
Depth to Groundwater <50 feet bgs									
WS25-71*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-72*	0-10	November 5, 2025	ND	ND	ND	ND	ND	ND	ND
WS25-73	0-5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	128
WS25-74	0-5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	128
WS25-75	0-5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	192
WS25-76	0-5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	256
WS25-77	0-5.5	November 21, 2025	ND	ND	ND	ND	ND	ND	96

"ND" Not Detected at the Reporting Limit

\* indicates variance samples

**Bold and Yellow shaded indicates exceedance outside of NM OCD Closure Criteria**



## **APPENDIX A – Closure Criteria Research Documentation**

Closure Criteria Determination			
Site Name: Riverbend 12-13 Federal Com 20H			
Release Coordinates: 32.15531,-104.04163		X: 602022	Y: 3551140
Site Specific Conditions		Value	Unit
1	Depth to Groundwater (nearest reference)	40	feet
	Depth to additional Groundwater (nearest reference)	37	feet
	Distance between release and nearest DTGW reference	6,074	feet
	Distance between release and nearest additional DTGW reference	7,890	feet
	Date of nearest DTGW reference measurement	October 30, 1979	
	Date of additional nearest DTGW reference measurement	November 18, 2020	
2	Within 300 feet of any continuously flowing watercourse or any other significant watercourse	3,792	feet
3	Within 200 feet of any lakebed, sinkhole or playa lake (measured from the ordinary high-water mark)	2,798	feet
4	Within 300 feet from an occupied residence, school, hospital, institution or church	15,269	feet
5	i) Within 500 feet of a spring or a private, domestic fresh water well used by less than five households for domestic or stock watering purposes, or	6,074	feet
	ii) Within 1000 feet of any fresh water well or spring	15,269	feet
6	Within incorporated municipal boundaries or within a defined municipal fresh water field covered under a municipal ordinance adopted pursuant to Section 3-27-3 NMSA 1978 as amended, unless the municipality specifically approves	No	(Y/N)
7	Within 300 feet of a wetland	2,798	feet
8	Within the area overlying a subsurface mine	No	(Y/N)
	Distance between release and nearest registered mine	17,846	feet
9	Within an unstable area (Karst Map)	High	Critical High Medium Low
	Distance between release and nearest unstable area	Zero Feet - Overlying - or Within Area	
10	Within a 100-year Floodplain	>500	year
	Distance between release and nearest FEMA Zone A (100-year Floodplain)	2,376	feet
11	Soil Type	Russler loam, 1 to 3 percent slopes	
12	Ecological Classification	Loamy	
13	Geology	Qoa- Older alluvial deposits of upland plains and piedmont areas	
	NMAC 19.15.29.12 E (Table 1) Closure Criteria	<50'	<50' 51-100' >100'

### Water Column/Average Depth to Water

POD Number	Code	Sub basin	County	(quarters are smallest to largest)						(NAD83 UTM in meters)		Map	Distance	Well Depth	Depth Water	Water Column
				Q64	Q16	Q4	Sec	Tws	Range	X	Y			(In feet)	(In feet)	(In feet)
<a href="#">C 04394 POD1</a>		CUB	ED	SW	NE	SE	19	25S	30E	602315.9	3553464.1		2342	110		
<a href="#">C 03782 POD1</a>		CUB	ED	SE	SW	SW	28	25S	30E	604525.7	3551444.2		2522	805	277	528
<a href="#">C 01360</a>		CUB	ED	SE	SW	SW	05	26S	30E	602996.6	3548152.0		3142	770	173	597
<a href="#">C 04705 POD1</a>		CUB	ED	NE	NW	NE	35	25S	29E	598866.5	3551191.8		3155			
<a href="#">C 01361</a>		CUB	ED	SW	SE	SW	05	26S	30E	603240.4	3548157.5		3221	775	184	591
<a href="#">C 03581 POD1</a>		CUB	ED	SE	SE	SE	05	26S	30E	604298.2	3548291.8		3646	800	320	480
<a href="#">C 03483</a>		C	ED	SE	SE	SE	05	26S	30E	604296.3	3548251.4		3676	700	200	500
<a href="#">C 04758 POD1</a>		CUB	ED	SE	SE	SE	17	25S	30E	604096.5	3554651.8		4078	110		
<a href="#">C 04558 POD1</a>		CUB	ED	SW	SE	SW	23	25S	29E	598353.7	3553039.4		4130			
<a href="#">C 04529 POD1</a>		CUB	ED	NW	SW	NW	18	25S	30E	601076.9	3555733.7		4689			
<a href="#">C 04755 POD2</a>		CUB	ED	SE	NW	SW	12	26S	29E	599857.0	3546955.1		4711	25		
<a href="#">C 04720 POD1</a>		CUB	ED	SE	NW	SW	12	26S	29E	599807.3	3546968.8		4722			
<a href="#">C 04755 POD1</a>		CUB	ED	SE	NW	SW	12	26S	29E	599787.4	3546971.4		4729	40		
<a href="#">C 04720 POD4</a>		CUB	ED	SE	NW	SW	12	26S	29E	599812.4	3546955.0		4732			
<a href="#">C 04720 POD2</a>		CUB	ED	SE	NW	SW	12	26S	29E	599835.7	3546932.1		4741			
<a href="#">C 04720 POD3</a>		CUB	ED	SE	NW	SW	12	26S	29E	599835.7	3546932.1		4741			
<a href="#">C 04720 POD5</a>		CUB	ED	SE	NW	SW	12	26S	29E	599840.0	3546920.4		4750	20		
<a href="#">C 04720 POD6</a>		CUB	ED	SE	NW	SW	12	26S	29E	599857.7	3546880.9		4777	31		
<a href="#">C 04755 POD3</a>		CUB	ED	SE	NW	SW	12	26S	29E	599747.8	3546862.3		4844	103		

Average Depth to Water: **230 feet**

Minimum Depth: **173 feet**

Maximum Depth: **320 feet**

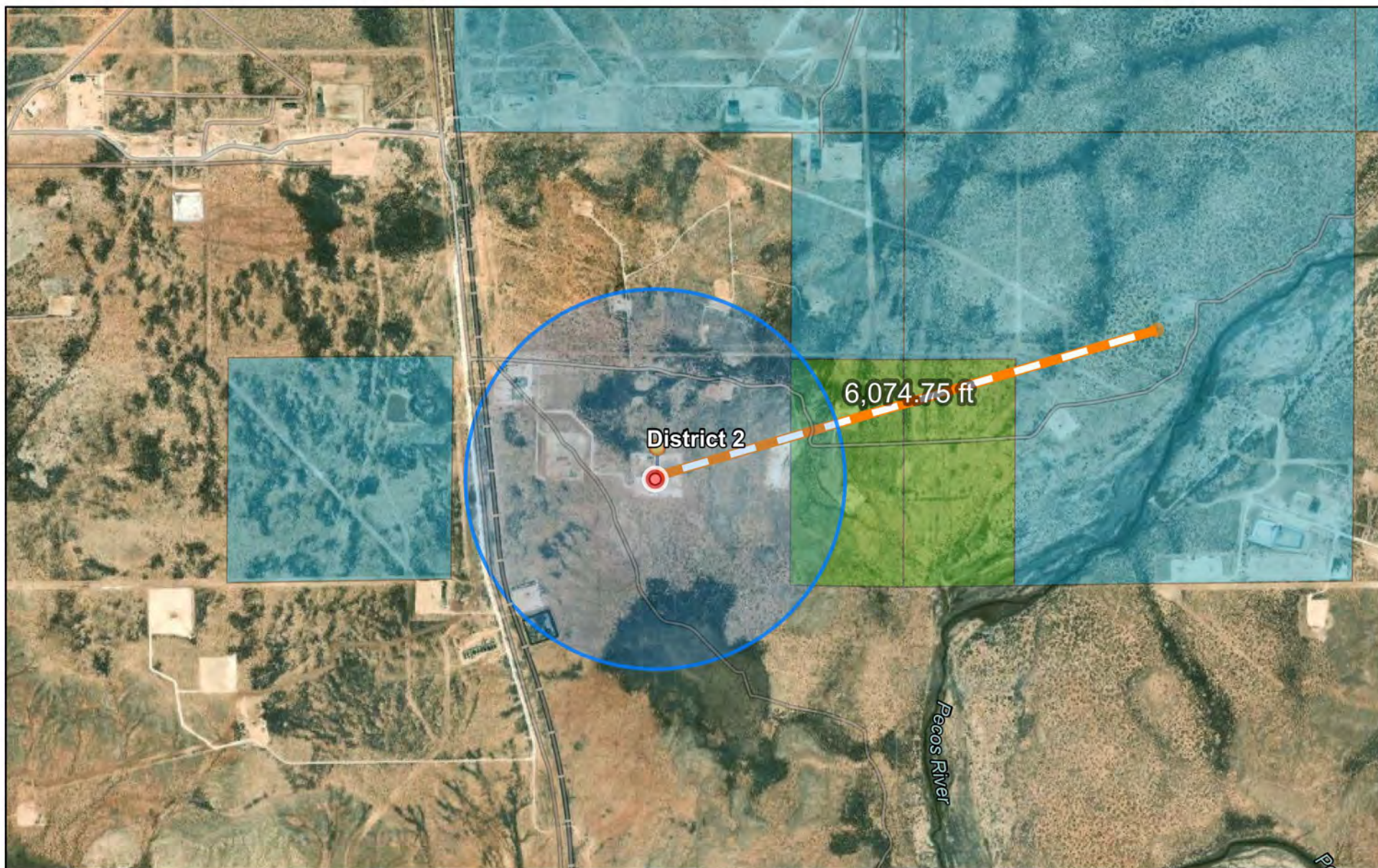
**Record Count:** 19

**UTM Filters (in meters):**  
**Easting:** 602022  
**Northing:** 3551140  
**Radius:** 5000

\* UTM location was derived from PLSS - see Help

The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

# OSE POD Locations Map 0.5 mi radius Riverbend 12-13 Federal Com 20H C-01880

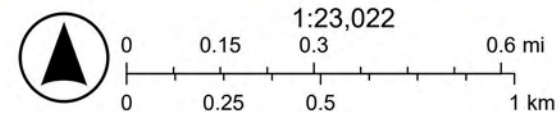


11/15/2025, 11:23:23 AM

- OSE District Boundary
- New Mexico State Trust Lands
- Surface Estate
- Both Estates

- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery

- High Resolution 30cm Imagery
- Citations
- 4.8m Resolution Metadata



Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community

READ INSTRUCTIONS ON BACK

Revised March 1972

APPLICATION TO APPROPRIATE UNDERGROUND WATERS IN ACCORDANCE WITH SECTION 75-11-1 NEW MEXICO STATUTES

194382  
44985  
82282  
2

1. Name and Address of Applicant:

File No. C-1880

19 OCT 29 PM 2 01 Received: October 25, 1979

Gulf Oil Corp.

P.O. Box 670

Hobbs, New Mexico 88240

STATE ENGINEER OFFICE  
SANTA FE, N.M. 87501

2. Describe well location under one of the following subheadings:

a. SW  $\frac{1}{4}$  SW  $\frac{1}{4}$  NE  $\frac{1}{4}$  of Sec. 6 Twp. 25S Rge. 29E N. M. P. M., in Eddy County.

b. Tract No. \_\_\_\_\_ of Map No. \_\_\_\_\_ of the \_\_\_\_\_

c. Lot No. \_\_\_\_\_ of Block No. \_\_\_\_\_ of the \_\_\_\_\_ Subdivision, recorded in \_\_\_\_\_ County.

d. X = \_\_\_\_\_ feet, Y = \_\_\_\_\_ feet, N. M. Coordinate System \_\_\_\_\_ Zone \_\_\_\_\_ in the \_\_\_\_\_ Grant.

e. Give street address or route and box No. of property upon which well is to be located, or location by direction and distance from known landmarks \_\_\_\_\_

3. Approximate depth (if known) 100 feet; outside diameter of casing 7 inches.

Name of driller (if known) Abbott Bros.

4. Use of water (check appropriate box or boxes):

- Household, non-commercial trees, lawn and garden not to exceed 1 acre.
- Livestock watering.
- Drinking and sanitary purposes and the irrigation of non-commercial trees, shrubs and lawns in conjunction with a commercial operation.
- Prospecting, mining or drilling operations to discover or develop natural resources.
- Construction of public works, highways and roads.

If any of the last three were marked, give name and nature of business under Remarks. (Item 5)

5. Remarks: Drilling-Rustler Bluffs WI Unit # 1

I, Murrell Abbott, affirm that the foregoing statements are true to the best of my knowledge and belief and that development shall not commence until approval of the permit has been obtained.

Gulf Oil Corp., Applicant

By: Helen Baker

Date: October 17, 1979

ACTION OF STATE ENGINEER

This application is approved for the use indicated, subject to all general conditions and to the specific conditions numbered 3, 5a, 5d, & 6 on the reverse side hereof. This permit will automatically expire unless this well is drilled or driven and the well record filed on or before October 31, 1980.

S. E. Reynolds, State Engineer

By: Delbert W. Nelson  
Delbert W. Nelson  
Assistant District II Supervisor

Date: October 26, 1979

File No. C-1880

Log Filed:

## GENERAL CONDITIONS OF APPROVAL

- A. The maximum amount of water that may be appropriated under this permit is 3 acre feet in any calendar year.
- B. The well shall be drilled only by a driller licensed in the State of New Mexico in accordance with Section 75-11-13 New Mexico Statutes Annotated. A licensed driller shall not be required for the construction of a driven well; provided, that the casing shall not exceed two and three-eighths (2 3/8) inches outside diameter (Section 75-11-13).
- C. Driller's log must be filed in the office of the State Engineer within 10 days after the well is drilled or driven. Failure to file the log within that time shall result in automatic cancellation of the permit. Log forms will be provided by the State Engineer upon request.
- D. The casing shall not exceed 7 inches outside diameter except under specific conditions in which reasons satisfactory to the State Engineer are shown.
- E. If the well under this permit is used at any time to serve more than one household, livestock in a commercial feed lot operation, or any other commercial purpose, the permittee shall comply with Specific Condition of Approval number 5(b).
- F. In the event this well is combined with other wells permitted under Section 75-11-1 New Mexico Statutes Annotated, the total outdoor use shall not exceed the irrigation of one acre of non-commercial trees, lawn, and garden, or the equivalent outside consumptive use, and the total appropriation for household and outdoor use from the entire water distribution system shall not exceed 3 acre feet per annum.

## SPECIFIC CONDITIONS OF APPROVAL

(Applicable only when so indicated on the other side of this form.)

1. Depth of the well shall not exceed the thickness of the (a) the valley fill or (b) Ogallala formation.
2. The well shall be constructed to artesian well specifications and the State Engineer Office shall be notified before casing is landed or cemented.
3. Appropriation and use of water under this permit shall not exceed a period of one year from the date of approval.
4. Use shall be limited to household, non-commercial trees, lawn and garden not to exceed one acre and/or stock use.
5. A totalizing meter shall be installed before the first branch of the discharge line from the well and the installation shall be acceptable to the State Engineer; the State Engineer shall be advised of the make, model, serial number, date of installation, and initial reading of the meter prior to appropriation of water and pumping records shall be submitted to the District Supervisor (a) for each calendar month, on or before the 30th day of the following month (b) on or before the 10th of January, April, July and October of each year for the three preceding calendar months (c) for each calendar year on or before the 30th day of January of the following year. (d) Or upon completion of the project if less than 30 days.
6. The well shall be plugged upon completion of the permitted use and a plugging report shall be filed in the office of the State Engineer within 10 days.
7. Final approval for the use of the well shall be dependent upon a leakage test made by the State Engineer Office.
8. Use shall be limited strictly to household and/or drinking and sanitary purposes; water shall be conveyed from the well to the place of use in closed conduit and the effluent returned to the underground so that it will not appear on the surface. No irrigation of lawns, garden, trees or use in any type of pool or pond is authorized under this permit.

## INSTRUCTIONS

The application shall be made in the name of the actual user of the well for the purpose specified in the application.

The application shall be executed in triplicate and forwarded with a \$1.00 filing fee to the appropriate office of the State Engineer.

A separate application must be filed for each well to be drilled or used.

If well to be used is an existing well, an explanation (and file number, if possible) should be given under Remarks. (Item 5.)

Applications for appropriation, well logs and request for information in the following basins should be addressed to the State Engineer at the office indicated;

Bluewater, Estancia, Rio Grande, and Sandia Basins  
District No. 1, 505 Marquette NW, Room 1023, Albuquerque, New Mexico 87101

Capitan, Carlsbad, Fort Sumner, Hondo, Jal, Lea, Penasco, Portales, Roswell, and Upper Pecos Basins  
District No. 2, Box 1717, Roswell, New Mexico 88201


Animas, Gila-San Francisco, Hot Springs, Las Animas Creek, Lordsburg, Mimbres, Nutt-Hockett, Playas, San Simon, and Virden Valley Basins  
District No. 3, Box 844, Deming, New Mexico 88030

Canadian River Basin  
State Engineer Office, State Capitol, Bataan Memorial Bldg., Santa Fe, New Mexico 87501

# Point of Diversion Summary

quarters are 1=NW 2=NE 3=SW 4=SE  
quarters are smallest to largest

NAD83 UTM in meters

Well Tag	POD Nbr	Q64	Q16	Q4	Sec	Tws	Rng	X	Y	Map
C 01880		SW	SW	NE	06	25S	29E	592161.0	3558605.0 *	

\* UTM location was derived from PLSS - see Help

<b>Driller License:</b>	46	<b>Driller Company:</b>	ABBOTT BROTHERS COMPANY		
<b>Driller Name:</b>	MURRELL ABBOTT				
<b>Drill Start Date:</b>	1979-10-29	<b>Drill Finish Date:</b>	1979-10-30	<b>Plug Date:</b>	
<b>Log File Date:</b>	1979-11-05	<b>PCW Rcv Date:</b>		<b>Source:</b>	Shallow
<b>Pump Type:</b>		<b>Pipe Discharge Size:</b>		<b>Estimated Yield:</b>	
<b>Casing Size:</b>	7.00	<b>Depth Well:</b>	85	<b>Depth Water:</b>	40

## Water Bearing Stratifications:

Top	Bottom	Description
40	85	Sandstone/Gravel/Conglomerate

## Casing Perforations:

Top	Bottom
40	60

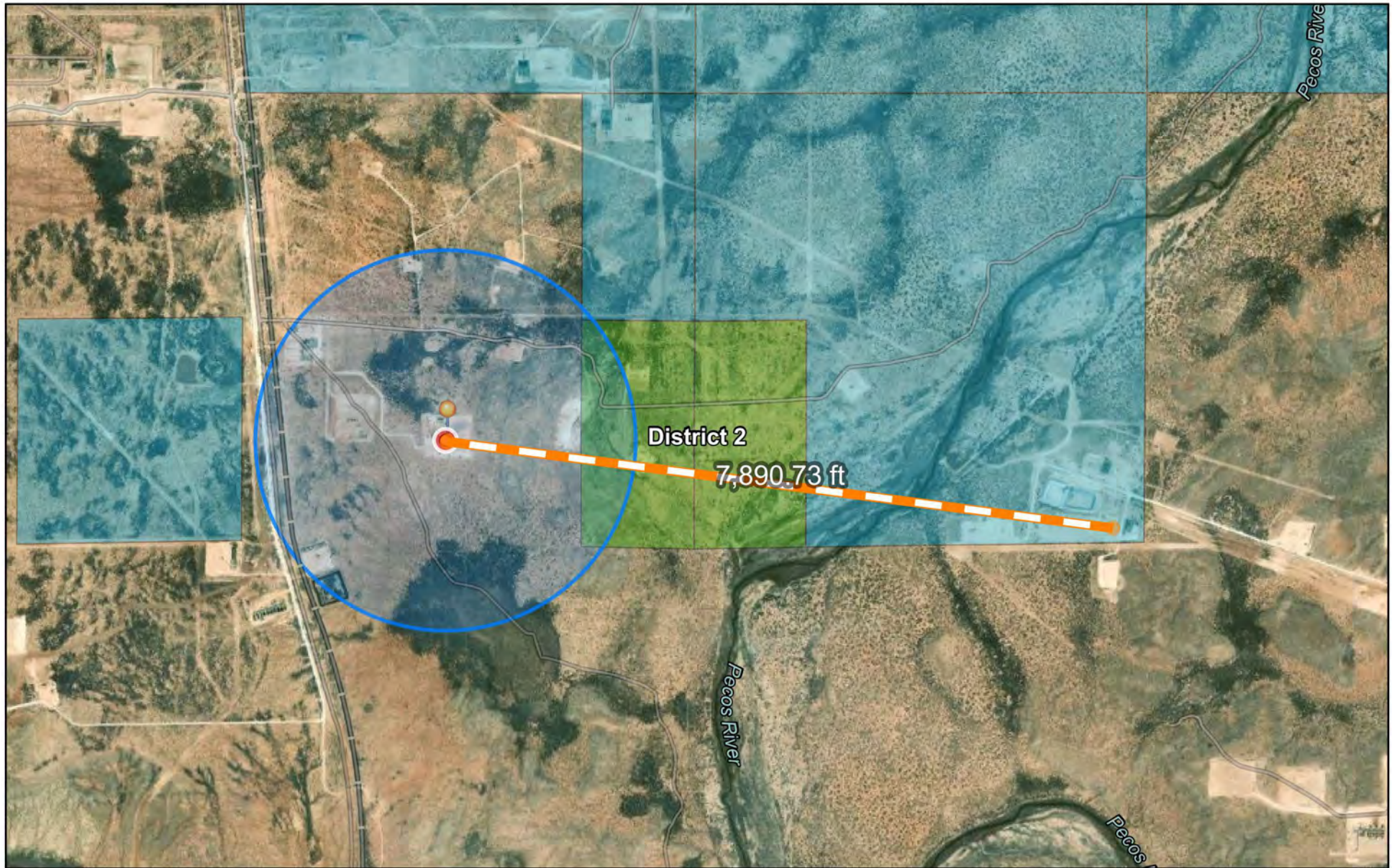
The data is furnished by the NMOSE/ISC and is accepted by the recipient with the expressed understanding that the OSE/ISC make no warranties, expressed or implied, concerning the accuracy, completeness, reliability, usability, or suitability for any particular purpose of the data.

3/24/25 12:52 PM MST

Point of Diversion Summary

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# OSE POD Locations Map 0.5 mi radius Riverbend 12-13 Federal Com 20H C-04493

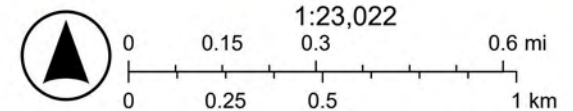


11/15/2025, 11:42:38 AM

- OSE District Boundary
- New Mexico State Trust Lands
- Surface Estate
- Both Estates

- World Imagery
- Low Resolution 15m Imagery
- High Resolution 60cm Imagery

- High Resolution 30cm Imagery
- Citations
- 4.8m Resolution Metadata



Vantor, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community



# WELL RECORD & LOG

OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

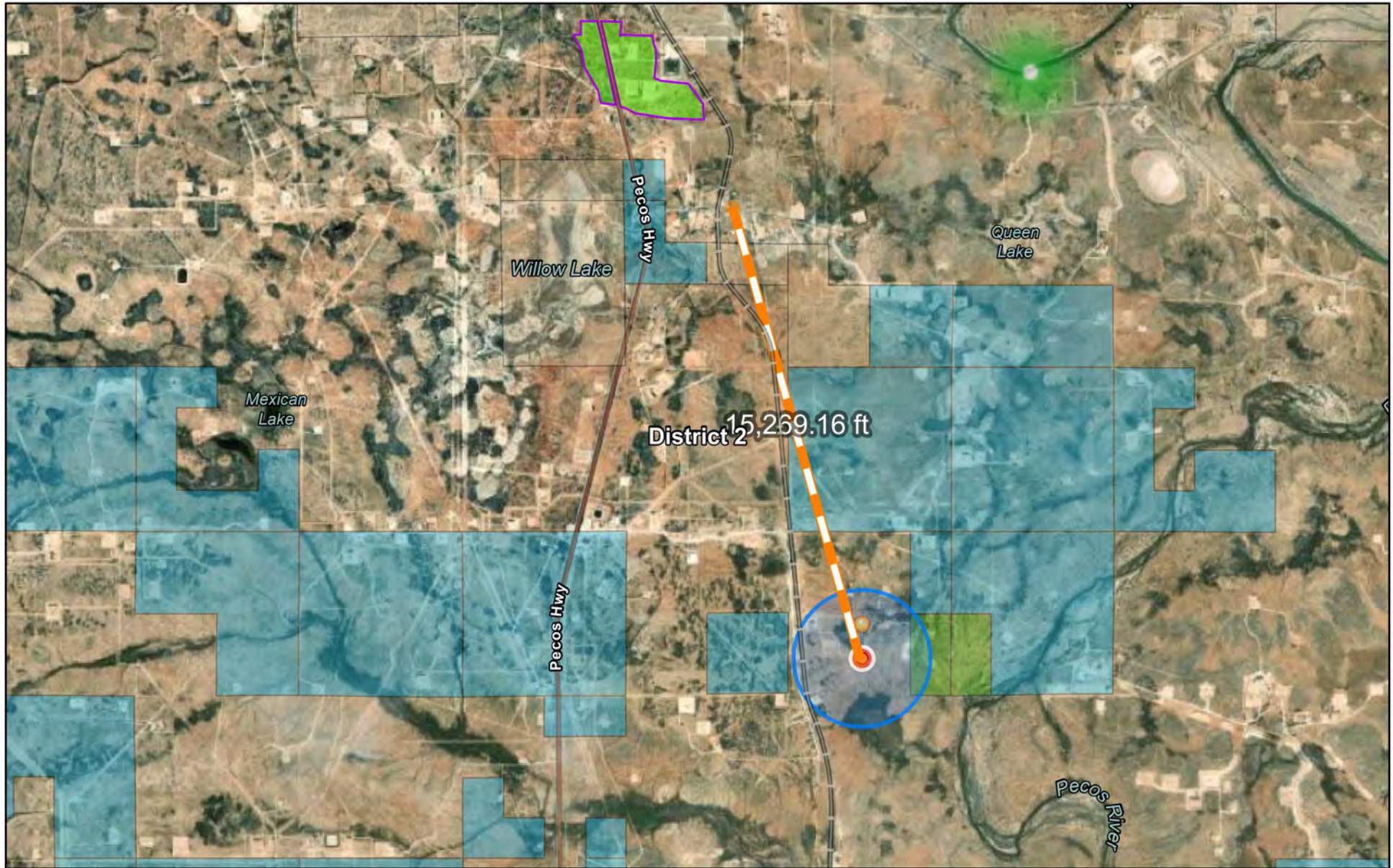
<b>1. GENERAL AND WELL LOCATION</b>	OSE POD NO. (WELL NO.) POD1 (BH-01)		WELL TAG ID NO. n/a		OSE FILE NO(S). C-4493			
	WELL OWNER NAME(S) XTO Energy (Kyle Littrell)				PHONE (OPTIONAL)			
	WELL OWNER MAILING ADDRESS 6401 Holiday Hill Dr.				CITY Midland	STATE TX	ZIP 79707	
	WELL LOCATION (FROM GPS)	LATITUDE	DEGREES 32°	MINUTES 9'	SECONDS 9.09" N	* ACCURACY REQUIRED: ONE TENTH OF A SECOND		
		LONGITUDE	-104°	0'	58.81" W	* DATUM REQUIRED: WGS 84		
DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE SE NE SE Sec. 6 T25S R29E								
<b>2. DRILLING &amp; CASING INFORMATION</b>	LICENSE NO. 1249		NAME OF LICENSED DRILLER Jackie D. Atkins			NAME OF WELL DRILLING COMPANY Atkins Engineering Associates, Inc.		
	DRILLING STARTED 11/18/2020	DRILLING ENDED 11/18/2020	DEPTH OF COMPLETED WELL (FT) temporary well material	BORE HOLE DEPTH (FT) 57	DEPTH WATER FIRST ENCOUNTERED (FT) ±39			
	COMPLETED WELL IS: <input type="checkbox"/> ARTESIAN <input type="checkbox"/> DRY HOLE <input checked="" type="checkbox"/> SHALLOW (UNCONFINED)				STATIC WATER LEVEL IN COMPLETED WELL (FT) 37.05			
	DRILLING FLUID: <input checked="" type="checkbox"/> AIR <input type="checkbox"/> MUD ADDITIVES - SPECIFY:							
	DRILLING METHOD: <input type="checkbox"/> ROTARY <input type="checkbox"/> HAMMER <input type="checkbox"/> CABLE TOOL <input checked="" type="checkbox"/> OTHER - SPECIFY: Hollow Stem Auger							
	DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE (add coupling diameter)	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
	FROM	TO						
	0	57	±8.5	Boring- HSA	--	--	--	--
<b>3. ANNULAR MATERIAL</b>	DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT		
	FROM	TO						

OSE BIT DEC 17 2020 11:30

FOR OSE INTERNAL USE		WR-20 WELL RECORD & LOG (Version 06/30/17)			
FILE NO.	C-4484	POD NO.	1	TRN NO.	681638
LOCATION	444 T25S R29E Sec 6	WELL TAG ID NO.	N/A	PAGE 1 OF 2	



# OSE POD Locations Map 0.5 mi radius Riverbend 12-13 Federal Com 20H C-03833 Domestic



11/15/2025, 12:16:32 PM

### Water Right Regulations

- Negative Easement Area
- OSE District Boundary
- USGS Live Stream Gauges

### New Mexico State Trust Lands

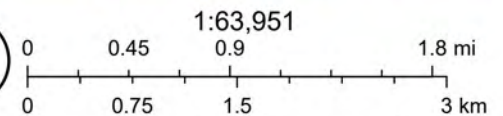
- Subsurface Estate
- Surface Estate
- Both Estates

### World Imagery

- Low Resolution 15m Imagery
- High Resolution 60cm Imagery
- High Resolution 30cm Imagery

### Citations

19m Resolution Metadata



Earthstar Geographics, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, (c) OpenStreetMap contributors, and the GIS User Community



# WELL RECORD & LOG

## OFFICE OF THE STATE ENGINEER

[www.ose.state.nm.us](http://www.ose.state.nm.us)

STATE ENGINEER OFFICE  
SAC WELLS NEW MEXICO

2015 MAR 23 PM 1:03

**1. GENERAL AND WELL LOCATION**

OSE POD NUMBER (WELL NUMBER) \_\_\_\_\_ OSE FILE NUMBER(S) **C-3833**

WELL OWNER NAME(S) **Scott Bronson** PHONE (OPTIONAL) **575-885-2066**

WELL OWNER MAILING ADDRESS **1501 Mountain Shadow** CITY **Carlsbad** STATE **N.M.** ZIP **88220**

WELL LOCATION (FROM GPS)	DEGREES		MINUTES	SECONDS	N	
	LATITUDE	<b>32</b>	<b>11</b>	<b>44</b>		
	LONGITUDE		<b>104</b>	<b>3</b>	<b>19</b>	W

\* ACCURACY REQUIRED: ONE TENTH OF A SECOND  
\* DATUM REQUIRED: WGS 84

DESCRIPTION RELATING WELL LOCATION TO STREET ADDRESS AND COMMON LANDMARKS - PLSS (SECTION, TOWNSHIP, RANGE) WHERE AVAILABLE  
**NE NW NE Sec. 26 T24S R28E**

**2. DRILLING & CASING INFORMATION**

LICENSE NUMBER **WD1229** NAME OF LICENSED DRILLER **Richard Carter** NAME OF WELL DRILLING COMPANY **Carter Well Drilling**

DRILLING STARTED **2/19/15** DRILLING ENDED **3/6/15** DEPTH OF COMPLETED WELL (FT) **96** BORE HOLE DEPTH (FT) **100** DEPTH WATER FIRST ENCOUNTERED (FT) **55**

COMPLETED WELL IS:  ARTESIAN  DRY HOLE  SHALLOW (UNCONFINED) STATIC WATER LEVEL IN COMPLETED WELL (FT) **45**

DRILLING FLUID:  AIR  MUD  ADDITIVES - SPECIFY: **foam**

DRILLING METHOD:  ROTARY  HAMMER  CABLE TOOL  OTHER - SPECIFY: \_\_\_\_\_

DEPTH (feet bgl)		BORE HOLE DIAM (inches)	CASING MATERIAL AND/OR GRADE (include each casing string, and note sections of screen)	CASING CONNECTION TYPE	CASING INSIDE DIAM. (inches)	CASING WALL THICKNESS (inches)	SLOT SIZE (inches)
FROM	TO						
<b>96</b>	<b>-2.6</b>	<b>9 7/8</b>	<b>PVC Sch 40</b>	<b>glue</b>	<b>6"</b>	<b>.313</b>	
<b>56</b>	<b>96</b>	<b>9 7/8</b>	<b>PVC Sch 40</b>	<b>glue</b>	<b>6"</b>	<b>.313</b>	<b>.050</b>

**3. ANNULAR MATERIAL**

DEPTH (feet bgl)		BORE HOLE DIAM. (inches)	LIST ANNULAR SEAL MATERIAL AND GRAVEL PACK SIZE-RANGE BY INTERVAL	AMOUNT (cubic feet)	METHOD OF PLACEMENT
FROM	TO				
<b>21</b>	<b>0</b>	<b>9 7/8</b>	<b>Cement + 5.2 gal/sk.</b>	<b>50</b>	<b>tremie</b>
<b>21</b>	<b>96</b>	<b>9 7/8</b>	<b>3/8 chips</b>	<b>135</b>	<b>shovel</b>

FOR OSE INTERNAL USE

FILE NUMBER **C-3833** POD NUMBER **1** WR-20 WELL RECORD & LOG (Version 06/08/2012)

LOCATION **24S.28E.26.2.1.2** TRN NUMBER **560718**

PAGE 1 OF 2

4. HYDROGEOLOGIC LOG OF WELL	DEPTH (feet bgl)		THICKNESS (feet)	COLOR AND TYPE OF MATERIAL ENCOUNTERED - INCLUDE WATER-BEARING CAVITIES OR FRACTURE ZONES (attach supplemental sheets to fully describe all units)	WATER BEARING? (YES / NO)		ESTIMATED YIELD FOR WATER-BEARING ZONES (gpm)
	FROM	TO			<input type="checkbox"/> Y	<input type="checkbox"/> N	
	0	26	26	Red Sandy Clay	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
	26	55	29	white lime stone	<input type="checkbox"/> Y	<input checked="" type="checkbox"/> N	
	55	100	45	white lime stone, Fractured	<input checked="" type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
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					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
					<input type="checkbox"/> Y	<input type="checkbox"/> N	
METHOD USED TO ESTIMATE YIELD OF WATER-BEARING STRATA: <input type="checkbox"/> PUMP					TOTAL ESTIMATED WELL YIELD (gpm):		
<input type="checkbox"/> AIR LIFT <input type="checkbox"/> BAILER <input checked="" type="checkbox"/> OTHER - SPECIFY: <i>Weir</i>					150		
5. TEST; RIG SUPERVISION	WELL TEST	TEST RESULTS - ATTACH A COPY OF DATA COLLECTED DURING WELL TESTING, INCLUDING DISCHARGE METHOD, START TIME, END TIME, AND A TABLE SHOWING DISCHARGE AND DRAWDOWN OVER THE TESTING PERIOD.					
	MISCELLANEOUS INFORMATION:						
	PRINT NAME(S) OF DRILL RIG SUPERVISOR(S) THAT PROVIDED ONSITE SUPERVISION OF WELL CONSTRUCTION OTHER THAN LICENSEE:						
6. SIGNATURE	THE UNDERSIGNED HEREBY CERTIFIES THAT, TO THE BEST OF HIS OR HER KNOWLEDGE AND BELIEF, THE FOREGOING IS A TRUE AND CORRECT RECORD OF THE ABOVE DESCRIBED HOLE AND THAT HE OR SHE WILL FILE THIS WELL RECORD WITH THE STATE ENGINEER AND THE PERMIT HOLDER WITHIN 20 DAYS AFTER COMPLETION OF WELL DRILLING:						
	<i>Richard Carter</i> Richard Carter					<i>3/18/15</i>	
	SIGNATURE OF DRILLER / PRINT SIGNEE NAME					DATE	

FOR OSE INTERNAL USE	WR-20 WELL RECORD & LOG (Version 06/08/2012)	
FILE NUMBER <i>C-3833</i>	POD NUMBER <i>1</i>	TRN NUMBER <i>560718</i>
LOCATION <i>245-28E-26-2-1-2</i>	PAGE 2 OF 2	

**Measurement** [X]

| Miles ▾

Measurement Result

---

**5.05 Miles**

**Clear**

Press **CTRL** to enable snapping

Cottonwood Hills  
3446 ft

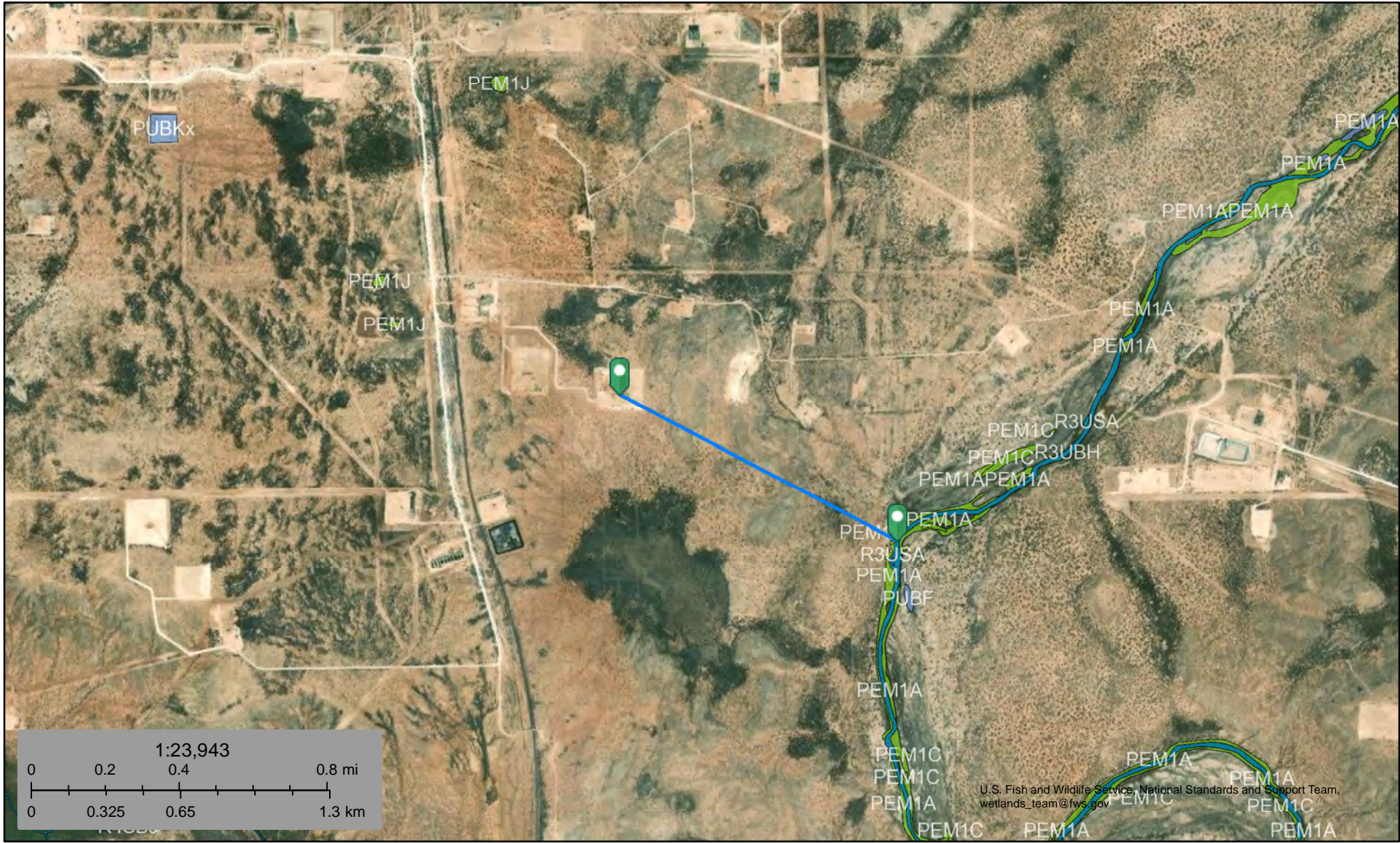
3km  
2mi

-104.10880 32.15945 Degrees

Map labels: Harroun Crossing, Malaga, Mexican Lake, Salt Draw, Pecos Hwy, Red Bluff Draw, Cottonwood Hills, 396, 285, 3132 ft, 3446 ft, 3km, 2mi, Est. by NASA, N



# 02 - Riverbend 12-13 Federal Com 20H Watercourse - 3,792 feet



U.S. Fish and Wildlife Service, National Standards and Support Team,  
wetlands\_team@fws.gov

December 18, 2025

**Wetlands**








- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

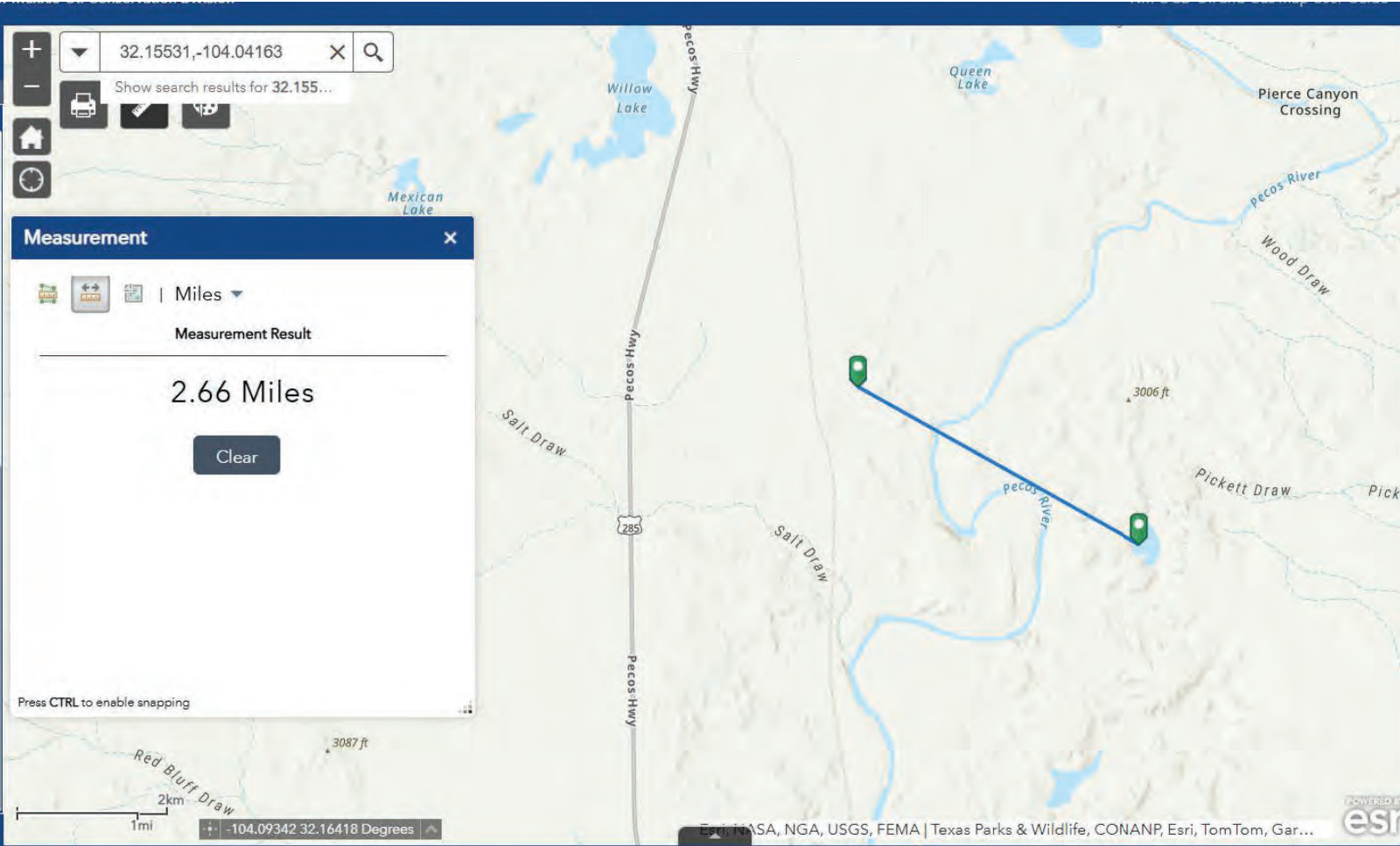


March 24, 2025

**Wetlands**

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |








This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.



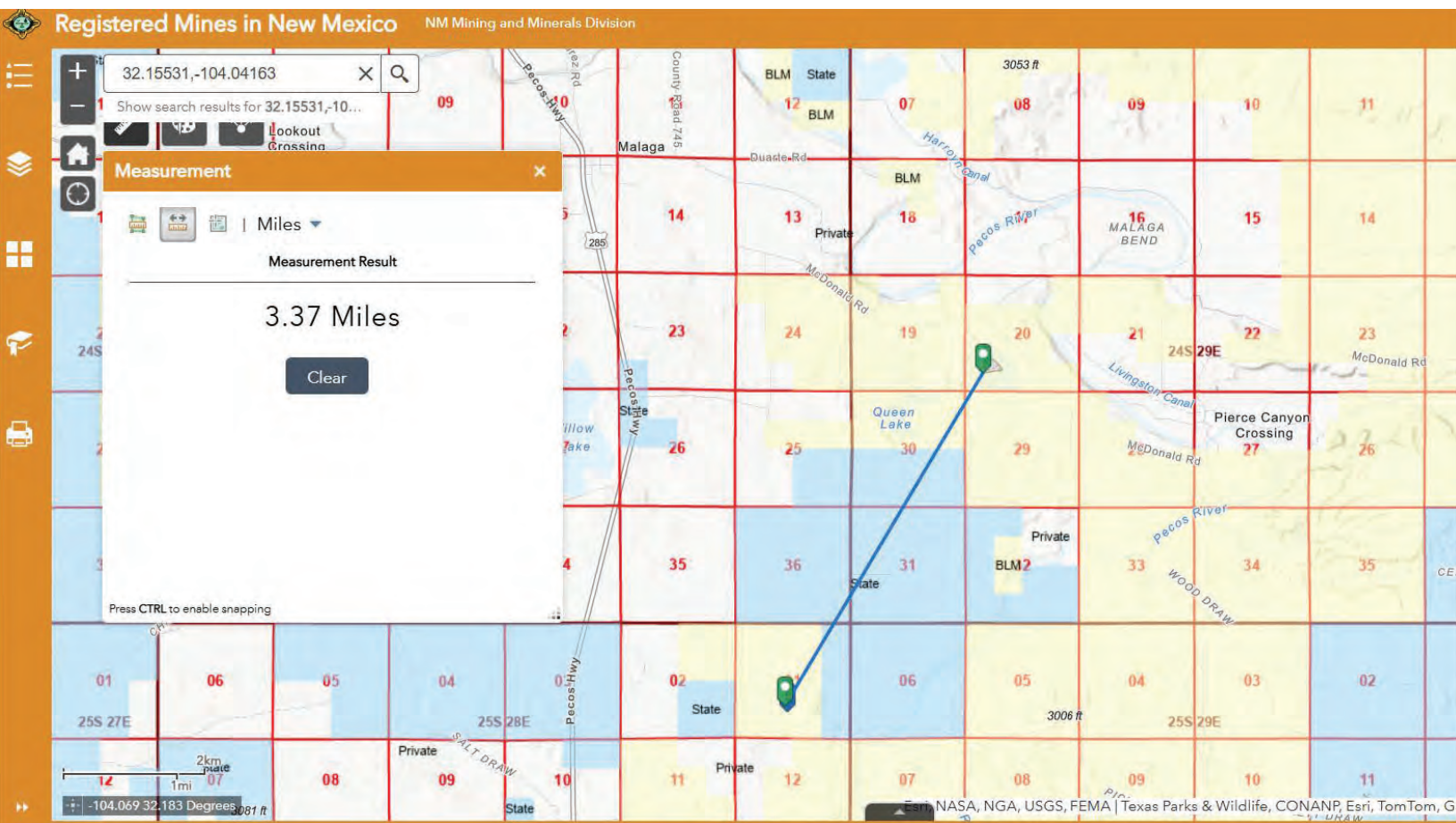


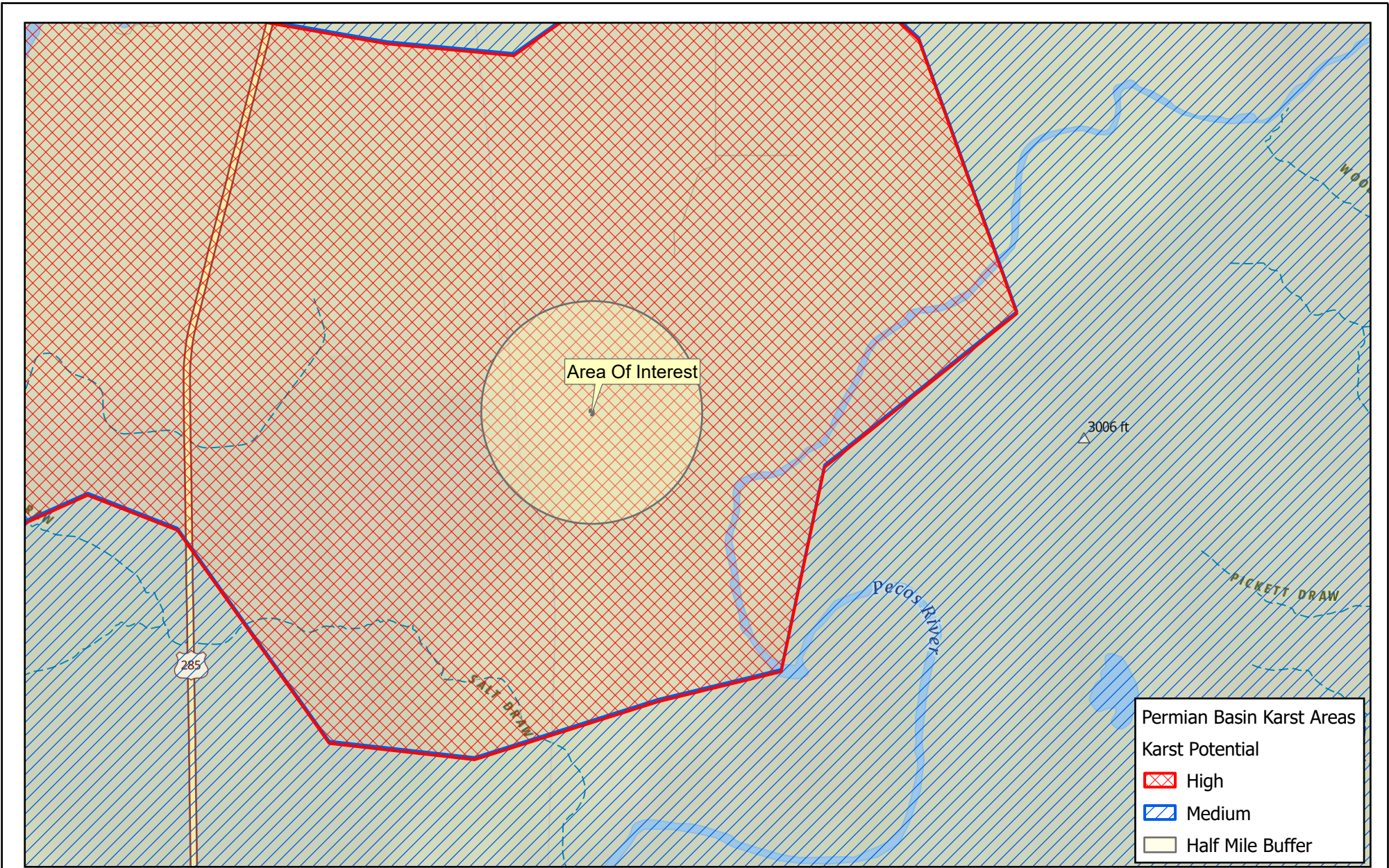
March 24, 2025

**Wetlands**

- |   |                                |   |                                   |   |          |
|---|--------------------------------|---|-----------------------------------|---|----------|
|  | Estuarine and Marine Deepwater |  | Freshwater Emergent Wetland       |  | Lake     |
|  | Estuarine and Marine Wetland   |  | Freshwater Forested/Shrub Wetland |  | Other    |
|   |                                |  | Freshwater Pond                   |  | Riverine |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.





	<p>0 1,500 3,000 ft</p> <p>NAD 1983 StatePlane New Mexico East FIPS 3001 Feet</p>	<p>Map Center: Lat/Long: 32.153289°N, 104.033573°W</p> <p>Date: Mar 25/25</p> <p>N</p>	<p><b>Karst Potential</b> <b>Riverbend 12-13 Federal Com 20H</b></p>	<p>FIGURE: <b>9</b></p>	
--	---	--	--	-----------------------------	--

Geospatial data presented in this figure may be derived from external sources and Vertex does not assume any liability for inaccuracies. This figure is intended for reference use only and is not certified for legal, survey, or engineering purposes.

Note: Georeferenced image from Esri, 2025. Site features from GPS, Vertex, 2025.

**VERSATILITY. EXPERTISE.**





A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

# Custom Soil Resource Report for Eddy Area, New Mexico



November 15, 2025

# Preface

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Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (<http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/>) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (<https://offices.sc.egov.usda.gov/locator/app?agency=nrcs>) or your NRCS State Soil Scientist ([http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2\\_053951](http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951)).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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# Contents

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<b>Preface</b> .....	2
<b>How Soil Surveys Are Made</b> .....	5
<b>Soil Map</b> .....	8
Soil Map.....	9
Legend.....	10
Map Unit Legend.....	11
Map Unit Descriptions.....	11
Eddy Area, New Mexico.....	13
EC—Ector stony loam, 0 to 9 percent slopes.....	13
PD—Pajarito-Dune land complex, 0 to 3 percent slopes.....	14
RG—Reeves-Gypsum land complex, 0 to 3 percent slopes.....	15
RS—Russler loam, 1 to 3 percent slopes.....	17
UG—Upton gravelly loam, 0 to 9 percent slopes.....	18
<b>References</b> .....	20

## How Soil Surveys Are Made

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Soil surveys are made to provide information about the soils and miscellaneous areas in a specific area. They include a description of the soils and miscellaneous areas and their location on the landscape and tables that show soil properties and limitations affecting various uses. Soil scientists observed the steepness, length, and shape of the slopes; the general pattern of drainage; the kinds of crops and native plants; and the kinds of bedrock. They observed and described many soil profiles. A soil profile is the sequence of natural layers, or horizons, in a soil. The profile extends from the surface down into the unconsolidated material in which the soil formed or from the surface down to bedrock. The unconsolidated material is devoid of roots and other living organisms and has not been changed by other biological activity.

Currently, soils are mapped according to the boundaries of major land resource areas (MLRAs). MLRAs are geographically associated land resource units that share common characteristics related to physiography, geology, climate, water resources, soils, biological resources, and land uses (USDA, 2006). Soil survey areas typically consist of parts of one or more MLRA.

The soils and miscellaneous areas in a survey area occur in an orderly pattern that is related to the geology, landforms, relief, climate, and natural vegetation of the area. Each kind of soil and miscellaneous area is associated with a particular kind of landform or with a segment of the landform. By observing the soils and miscellaneous areas in the survey area and relating their position to specific segments of the landform, a soil scientist develops a concept, or model, of how they were formed. Thus, during mapping, this model enables the soil scientist to predict with a considerable degree of accuracy the kind of soil or miscellaneous area at a specific location on the landscape.

Commonly, individual soils on the landscape merge into one another as their characteristics gradually change. To construct an accurate soil map, however, soil scientists must determine the boundaries between the soils. They can observe only a limited number of soil profiles. Nevertheless, these observations, supplemented by an understanding of the soil-vegetation-landscape relationship, are sufficient to verify predictions of the kinds of soil in an area and to determine the boundaries.

Soil scientists recorded the characteristics of the soil profiles that they studied. They noted soil color, texture, size and shape of soil aggregates, kind and amount of rock fragments, distribution of plant roots, reaction, and other features that enable them to identify soils. After describing the soils in the survey area and determining their properties, the soil scientists assigned the soils to taxonomic classes (units). Taxonomic classes are concepts. Each taxonomic class has a set of soil characteristics with precisely defined limits. The classes are used as a basis for comparison to classify soils systematically. Soil taxonomy, the system of taxonomic classification used in the United States, is based mainly on the kind and character of soil properties and the arrangement of horizons within the profile. After the soil

## Custom Soil Resource Report

scientists classified and named the soils in the survey area, they compared the individual soils with similar soils in the same taxonomic class in other areas so that they could confirm data and assemble additional data based on experience and research.

The objective of soil mapping is not to delineate pure map unit components; the objective is to separate the landscape into landforms or landform segments that have similar use and management requirements. Each map unit is defined by a unique combination of soil components and/or miscellaneous areas in predictable proportions. Some components may be highly contrasting to the other components of the map unit. The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The delineation of such landforms and landform segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, onsite investigation is needed to define and locate the soils and miscellaneous areas.

Soil scientists make many field observations in the process of producing a soil map. The frequency of observation is dependent upon several factors, including scale of mapping, intensity of mapping, design of map units, complexity of the landscape, and experience of the soil scientist. Observations are made to test and refine the soil-landscape model and predictions and to verify the classification of the soils at specific locations. Once the soil-landscape model is refined, a significantly smaller number of measurements of individual soil properties are made and recorded. These measurements may include field measurements, such as those for color, depth to bedrock, and texture, and laboratory measurements, such as those for content of sand, silt, clay, salt, and other components. Properties of each soil typically vary from one point to another across the landscape.

Observations for map unit components are aggregated to develop ranges of characteristics for the components. The aggregated values are presented. Direct measurements do not exist for every property presented for every map unit component. Values for some properties are estimated from combinations of other properties.

While a soil survey is in progress, samples of some of the soils in the area generally are collected for laboratory analyses and for engineering tests. Soil scientists interpret the data from these analyses and tests as well as the field-observed characteristics and the soil properties to determine the expected behavior of the soils under different uses. Interpretations for all of the soils are field tested through observation of the soils in different uses and under different levels of management. Some interpretations are modified to fit local conditions, and some new interpretations are developed to meet local needs. Data are assembled from other sources, such as research information, production records, and field experience of specialists. For example, data on crop yields under defined levels of management are assembled from farm records and from field or plot experiments on the same kinds of soil.

Predictions about soil behavior are based not only on soil properties but also on such variables as climate and biological activity. Soil conditions are predictable over long periods of time, but they are not predictable from year to year. For example, soil scientists can predict with a fairly high degree of accuracy that a given soil will have a high water table within certain depths in most years, but they cannot predict that a high water table will always be at a specific level in the soil on a specific date.

After soil scientists located and identified the significant natural bodies of soil in the survey area, they drew the boundaries of these bodies on aerial photographs and

### Custom Soil Resource Report

identified each as a specific map unit. Aerial photographs show trees, buildings, fields, roads, and rivers, all of which help in locating boundaries accurately.

## Soil Map

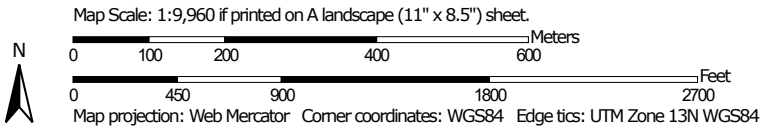
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The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

### Custom Soil Resource Report Soil Map




Soil Map may not be valid at this scale.



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**MAP LEGEND**

**Area of Interest (AOI)**

 Area of Interest (AOI)




















**Soils**







 Soil Map Unit Polygons

 Soil Map Unit Lines


 Soil Map Unit Points

**Special Point Features**






-  Blowout
-  Borrow Pit
-  Clay Spot
-  Closed Depression
-  Gravel Pit
-  Gravelly Spot
-  Landfill
-  Lava Flow
-  Marsh or swamp
-  Mine or Quarry
-  Miscellaneous Water
-  Perennial Water
-  Rock Outcrop
-  Saline Spot
-  Sandy Spot
-  Severely Eroded Spot
-  Sinkhole
-  Slide or Slip
-  Sodic Spot

-  Spoil Area
-  Stony Spot
-  Very Stony Spot
-  Wet Spot
-  Other
-  Special Line Features

**Water Features**

 Streams and Canals

**Transportation**

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

**Background**

 Aerial Photography

**MAP INFORMATION**

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL:  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Eddy Area, New Mexico  
 Survey Area Data: Version 21, Sep 9, 2025

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 12, 2022—Dec 2, 2022

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Custom Soil Resource Report

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
EC	Ector stony loam, 0 to 9 percent slopes	73.7	14.5%
PD	Pajarito-Dune land complex, 0 to 3 percent slopes	48.0	9.4%
RG	Reeves-Gypsum land complex, 0 to 3 percent slopes	65.9	12.9%
RS	Russler loam, 1 to 3 percent slopes	307.4	60.4%
UG	Upton gravelly loam, 0 to 9 percent slopes	14.4	2.8%
<b>Totals for Area of Interest</b>		<b>509.4</b>	<b>100.0%</b>

## Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

## Custom Soil Resource Report

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

## Custom Soil Resource Report

**Eddy Area, New Mexico****EC—Ector stony loam, 0 to 9 percent slopes****Map Unit Setting**

*National map unit symbol:* 1w4b  
*Elevation:* 3,300 to 4,800 feet  
*Mean annual precipitation:* 10 to 18 inches  
*Mean annual air temperature:* 58 to 62 degrees F  
*Frost-free period:* 195 to 210 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Ector and similar soils:* 100 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Ector****Setting**

*Landform:* Ridges, hills  
*Landform position (two-dimensional):* Shoulder, backslope, footslope, toeslope  
*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from limestone

**Typical profile**

*H1 - 0 to 6 inches:* very cobbly loam  
*H2 - 6 to 60 inches:* bedrock

**Properties and qualities**

*Slope:* 0 to 9 percent  
*Depth to restrictive feature:* 4 to 20 inches to lithic bedrock  
*Drainage class:* Well drained  
*Runoff class:* Medium  
*Capacity of the most limiting layer to transmit water (Ksat):* Moderately low to high  
 (0.06 to 2.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 60 percent  
*Maximum salinity:* Nonsaline to slightly saline (0.0 to 4.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Very low (about 0.5 inches)

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* D  
*Ecological site:* R042CY158NM - Very Shallow  
*Hydric soil rating:* No

## Custom Soil Resource Report

**PD—Pajarito-Dune land complex, 0 to 3 percent slopes****Map Unit Setting**

*National map unit symbol:* 1w55  
*Elevation:* 3,000 to 5,000 feet  
*Mean annual precipitation:* 10 to 15 inches  
*Mean annual air temperature:* 60 to 64 degrees F  
*Frost-free period:* 190 to 220 days  
*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Pajarito and similar soils:* 46 percent  
*Dune land:* 45 percent  
*Minor components:* 9 percent  
*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Pajarito****Setting**

*Landform:* Dunes, interdunes, plains  
*Landform position (three-dimensional):* Side slope  
*Down-slope shape:* Convex, linear  
*Across-slope shape:* Convex, linear  
*Parent material:* Mixed alluvium and/or eolian sands

**Typical profile**

*H1 - 0 to 9 inches:* fine sandy loam  
*H2 - 9 to 36 inches:* fine sandy loam  
*H3 - 36 to 72 inches:* fine sandy loam

**Properties and qualities**

*Slope:* 0 to 3 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* Very low  
*Capacity of the most limiting layer to transmit water (Ksat):* High (2.00 to 6.00 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 15 percent  
*Maximum salinity:* Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 1.0  
*Available water supply, 0 to 60 inches:* Moderate (about 8.4 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 2e  
*Land capability classification (nonirrigated):* 7e  
*Hydrologic Soil Group:* A  
*Ecological site:* R070BD003NM - Loamy Sand  
*Hydric soil rating:* No

## Custom Soil Resource Report

**Description of Dune Land****Setting**

*Landform:* Dune fields

*Landform position (two-dimensional):* Shoulder, backslope, footslope

*Landform position (three-dimensional):* Talf

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear, convex

*Parent material:* Mixed alluvium and/or eolian sands

**Typical profile**

*H1 - 0 to 6 inches:* sandy loam

*H2 - 6 to 60 inches:* sandy loam

**Interpretive groups**

*Land capability classification (irrigated):* None specified

*Ecological site:* R070BD003NM - Loamy Sand

*Hydric soil rating:* No

**Minor Components****Rock outcrop**

*Percent of map unit:* 5 percent

*Hydric soil rating:* No

**Largo**

*Percent of map unit:* 4 percent

*Ecological site:* R070BC007NM - Loamy

*Hydric soil rating:* No

**RG—Reeves-Gypsum land complex, 0 to 3 percent slopes****Map Unit Setting**

*National map unit symbol:* 1w5f

*Elevation:* 1,250 to 5,000 feet

*Mean annual precipitation:* 10 to 25 inches

*Mean annual air temperature:* 57 to 70 degrees F

*Frost-free period:* 190 to 235 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Reeves and similar soils:* 55 percent

*Gypsum land:* 30 percent

*Minor components:* 15 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Reeves****Setting**

*Landform:* Hills, plains, ridges

## Custom Soil Resource Report

*Landform position (two-dimensional):* Shoulder, backslope, footslope, toeslope  
*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from gypsum

**Typical profile**

*H1 - 0 to 8 inches:* loam  
*H2 - 8 to 32 inches:* clay loam  
*H3 - 32 to 60 inches:* gypsiferous material

**Properties and qualities**

*Slope:* 0 to 1 percent  
*Depth to restrictive feature:* More than 80 inches  
*Drainage class:* Well drained  
*Runoff class:* High  
*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)  
*Depth to water table:* More than 80 inches  
*Frequency of flooding:* None  
*Frequency of ponding:* None  
*Calcium carbonate, maximum content:* 25 percent  
*Gypsum, maximum content:* 80 percent  
*Maximum salinity:* Very slightly saline to moderately saline (2.0 to 8.0 mmhos/cm)  
*Sodium adsorption ratio, maximum:* 4.0  
*Available water supply, 0 to 60 inches:* Low (about 4.3 inches)

**Interpretive groups**

*Land capability classification (irrigated):* 3s  
*Land capability classification (nonirrigated):* 7s  
*Hydrologic Soil Group:* B  
*Ecological site:* R070BC007NM - Loamy  
*Hydric soil rating:* No

**Description of Gypsum Land****Setting**

*Landform:* Hills, plains, ridges  
*Landform position (two-dimensional):* Shoulder, backslope, footslope, toeslope  
*Landform position (three-dimensional):* Side slope, head slope, nose slope, crest  
*Down-slope shape:* Convex  
*Across-slope shape:* Linear  
*Parent material:* Residuum weathered from gypsum

**Interpretive groups**

*Land capability classification (irrigated):* None specified  
*Land capability classification (nonirrigated):* 8s  
*Hydric soil rating:* No

**Minor Components****Largo**

*Percent of map unit:* 5 percent  
*Ecological site:* R070BC007NM - Loamy  
*Hydric soil rating:* No

**Reagan**

*Percent of map unit:* 5 percent

## Custom Soil Resource Report

*Ecological site:* R070BC007NM - Loamy

*Hydric soil rating:* No

**Cottonwood**

*Percent of map unit:* 5 percent

*Ecological site:* R070BC033NM - Salty Bottomland

*Hydric soil rating:* No

**RS—Russler loam, 1 to 3 percent slopes****Map Unit Setting**

*National map unit symbol:* 1w5j

*Elevation:* 1,250 to 5,300 feet

*Mean annual precipitation:* 10 to 25 inches

*Mean annual air temperature:* 57 to 70 degrees F

*Frost-free period:* 200 to 235 days

*Farmland classification:* Not prime farmland

**Map Unit Composition**

*Russler and similar soils:* 97 percent

*Minor components:* 3 percent

*Estimates are based on observations, descriptions, and transects of the mapunit.*

**Description of Russler****Setting**

*Landform:* Alluvial fans, plains

*Landform position (three-dimensional):* Rise

*Down-slope shape:* Linear, convex

*Across-slope shape:* Linear

*Parent material:* Alluvium

**Typical profile**

*H1 - 0 to 11 inches:* loam

*H2 - 11 to 45 inches:* clay loam

*H3 - 45 to 60 inches:* gypsiferous material

**Properties and qualities**

*Slope:* 1 to 3 percent

*Depth to restrictive feature:* 20 to 60 inches to paralithic bedrock

*Drainage class:* Well drained

*Runoff class:* High

*Capacity of the most limiting layer to transmit water (Ksat):* Very low to moderately low (0.00 to 0.06 in/hr)

*Depth to water table:* More than 80 inches

*Frequency of flooding:* None

*Frequency of ponding:* None

*Calcium carbonate, maximum content:* 15 percent

*Gypsum, maximum content:* 40 percent

*Maximum salinity:* Moderately saline to strongly saline (8.0 to 16.0 mmhos/cm)

### Custom Soil Resource Report

Sodium adsorption ratio, maximum: 4.0  
Available water supply, 0 to 60 inches: Low (about 4.4 inches)

#### Interpretive groups

Land capability classification (irrigated): 3e  
Land capability classification (nonirrigated): 7e  
Hydrologic Soil Group: C  
Ecological site: R070BC007NM - Loamy  
Hydric soil rating: No

#### Minor Components

##### Reeves

Percent of map unit: 1 percent  
Ecological site: R070BC007NM - Loamy  
Hydric soil rating: No

##### Reagan

Percent of map unit: 1 percent  
Ecological site: R070BC007NM - Loamy  
Hydric soil rating: No

##### Cottonwood

Percent of map unit: 1 percent  
Ecological site: R070BC033NM - Salty Bottomland  
Hydric soil rating: No

### UG—Upton gravelly loam, 0 to 9 percent slopes

#### Map Unit Setting

National map unit symbol: 1w64  
Elevation: 1,100 to 4,400 feet  
Mean annual precipitation: 7 to 15 inches  
Mean annual air temperature: 60 to 70 degrees F  
Frost-free period: 200 to 240 days  
Farmland classification: Not prime farmland

#### Map Unit Composition

Upton and similar soils: 96 percent  
Minor components: 4 percent  
Estimates are based on observations, descriptions, and transects of the mapunit.

#### Description of Upton

##### Setting

Landform: Fans, ridges  
Landform position (three-dimensional): Side slope, rise  
Down-slope shape: Convex  
Across-slope shape: Convex  
Parent material: Residuum weathered from limestone

## Custom Soil Resource Report

**Typical profile**

H1 - 0 to 9 inches: gravelly loam  
 H2 - 9 to 13 inches: gravelly loam  
 H3 - 13 to 21 inches: cemented  
 H4 - 21 to 60 inches: very gravelly loam

**Properties and qualities**

Slope: 0 to 9 percent  
 Depth to restrictive feature: 7 to 20 inches to petrocalcic  
 Drainage class: Well drained  
 Runoff class: High  
 Capacity of the most limiting layer to transmit water (Ksat): Low to moderately high  
 (0.01 to 0.60 in/hr)  
 Depth to water table: More than 80 inches  
 Frequency of flooding: None  
 Frequency of ponding: None  
 Calcium carbonate, maximum content: 75 percent  
 Maximum salinity: Nonsaline to very slightly saline (0.0 to 2.0 mmhos/cm)  
 Sodium adsorption ratio, maximum: 1.0  
 Available water supply, 0 to 60 inches: Very low (about 1.4 inches)

**Interpretive groups**

Land capability classification (irrigated): None specified  
 Land capability classification (nonirrigated): 7s  
 Hydrologic Soil Group: D  
 Ecological site: R070BC025NM - Shallow  
 Hydric soil rating: No

**Minor Components****Reagan**

Percent of map unit: 1 percent  
 Ecological site: R070BC007NM - Loamy  
 Hydric soil rating: No

**Atoka**

Percent of map unit: 1 percent  
 Ecological site: R070BC007NM - Loamy  
 Hydric soil rating: No

**Atoka**

Percent of map unit: 1 percent  
 Ecological site: R070BC007NM - Loamy  
 Hydric soil rating: No

**Upton**

Percent of map unit: 1 percent  
 Ecological site: R070BC025NM - Shallow  
 Hydric soil rating: No

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# Ecological site R070BC007NM

## Loamy

Accessed: 11/15/2025

### General information

**Provisional.** A provisional ecological site description has undergone quality control and quality assurance review. It contains a working state and transition model and enough information to identify the ecological site.

#### Figure 1. Mapped extent

Areas shown in blue indicate the maximum mapped extent of this ecological site. Other ecological sites likely occur within the highlighted areas. It is also possible for this ecological site to occur outside of highlighted areas if detailed soil survey has not been completed or recently updated.

**Table 1. Dominant plant species**

Tree	Not specified
Shrub	Not specified
Herbaceous	Not specified

### Physiographic features

This site occurs on uplands landforms, mainly on hill slopes, ridges, plains, terraces and some fan remnants. Slopes range from 1 to 5 percent and average about 3 percent. Average annual precipitation is about 8 to 14 inches. Elevations range from 2,842 to 5,000 feet.

**Table 2. Representative physiographic features**

Landforms	(1) Plain (2) Terrace (3) Fan piedmont
Flooding frequency	None
Ponding frequency	None
Elevation	2,842–5,000 ft

Slope	0–5%
Aspect	E, S, W

## Climatic features

The average annual precipitation ranges from 8 to 13 inches. Variations of 5 inches, more or less, are common. Over 80 percent of the precipitation falls from April through October. Most of the summer precipitation comes in the form of high intensity short duration thunderstorms.

Temperatures are characterized by distinct seasonal changes and large annual and diurnal temperature changes. The average annual temperature is 61 degrees with extremes of 25 degrees below zero in the winter to 112 degrees in the summer.

The average frost-free season is 207 to 220 days. The last killing frost is in late March or early April, and the first killing frost is in late October or early November.

Temperature and rainfall both favor warm season perennial plant growth. In years of abundant spring moisture, annual forbs and cool season grasses can make up an important component of this site. Strong winds blow from the southwest in January through June rapidly drying out the soil during a critical time for cool season plant growth.

Climate data was obtained from <http://www.wrcc.sage.dri.edu/summary/climsmnm.html> web site using 50% probability for freeze-free and frost-free seasons using 28.5 degrees F and 32.5 degrees F respectively.

**Table 3. Representative climatic features**

Frost-free period (average)	221 days
Freeze-free period (average)	240 days
Precipitation total (average)	13 in

## Influencing water features

This site is not influenced by wetland or streams.

## Soil features

The soils of this site are deep to moderately deep. The moderately deep soils have either a petrocalcic, petrogypsic or gypsum horizon between 30 and 40 inches.

Surface textures are loam, silt loam, very fine sandy loam, or clay loam. Substratum textures are loam, silty clay loam, clay loam, or silt loams. Subsoil textures are silt loam, clay loam silty clay loam, gravelly loam, gravelly clay loam or very gravelly loam.

Permeability is moderate to slow and the available water holding capacity is high to

moderate. The Atoka, Reeves, Russler, Milner soils may have high amounts of CaCO<sub>3</sub>, ranging as high as 40 percent in the subsoil. Rock fragments range from 5 to 50 percent in the subsoil. Reeves, Russler, Milner, Holloman soils will have 40 to 80 percent gypsum in the underlying material.

Maximum and minimum values listed below represent the characteristic soils for this site.

#### Characteristic Soils:

Atoka (petrocalcic)  
 Bigetty  
 Reagan  
 Reakor  
 Reeves (gypsum)  
 Russler (gypsum)  
 Largo  
 Russler (gypsum)  
 Largo  
 Berino  
 Tinney  
 Midessa  
 Ratliff  
 Holloman (gypsum)  
 Milner (gypsum)

**Table 4. Representative soil features**

Surface texture	(1) Loam (2) Very fine sandy loam (3) Silt loam
Family particle size	(1) Loamy
Drainage class	Well drained to somewhat excessively drained
Permeability class	Moderate to slow
Soil depth	30–72 in
Surface fragment cover ≤3"	0–5%
Surface fragment cover >3"	0%
Available water capacity (0-40in)	5–12 in
Calcium carbonate equivalent (0-40in)	0–10%
Electrical conductivity (0-40in)	0–8 mmhos/cm

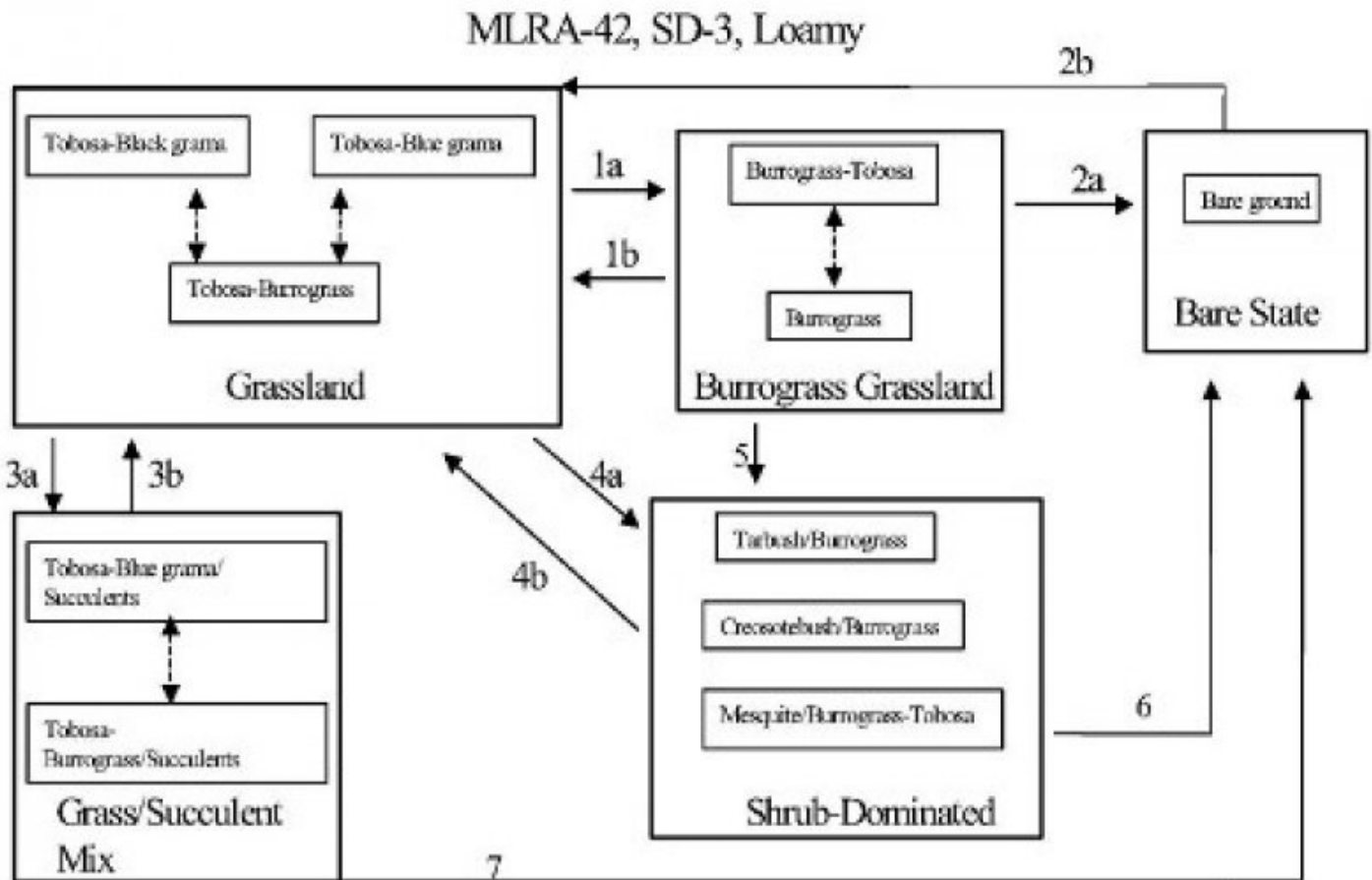
Sodium adsorption ratio (0-40in)	0-6
Soil reaction (1:1 water) (0-40in)	6.6-8.4
Subsurface fragment volume <=3" (Depth not specified)	0-5%
Subsurface fragment volume >3" (Depth not specified)	0%

## Ecological dynamics

Overview: The Loamy site is associated with the Gyp Upland ecological site with which it intergrades. There is a pronounced increase in alkali sacaton along this interface. The loamy site is also associated with the Gravelly and Shallow ecological sites from which it receives run-on water. The Draw site often dissects Loamy sites and is distinguished from the Loamy site by increased production or greater densities of woody species. The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs sparse and evenly distributed. Tobosa, black grama and blue grama are the dominant species. Retrogression within this state is characterized by a decrease in black and blue grama and an increase in burrograss. Continuous overgrazing and drought can initiate a transition to a Burrograss- Grassland state. Continued reduction in grass cover and resulting infiltration problems may eventually effect a change to a Bare State, with very little or no remaining grass cover. Alternatively, creosotebush, tarbush or mesquite may expand or invade. Transitions back to a Grassland State from a Bare or Shrub-Dominated state are costly and may not be economically feasible. Decreased fire frequency may play a part in the transition to the Grass/Succulent Mix state with increased amounts of cholla and prickly pear.

## State and transition model

Plant Communities and Transitional Pathways (diagram)



- 1a. Soil drying, overgrazing, drought, soil surface sealing. 1b. Restore natural overland flow, increase infiltration, prescribed grazing.
- 2a. Severe reduction in cover, soil surface sealing, decreased infiltration, erosion. 2b. Restore hydrology, break up physical crust, range seeding, prescribed grazing.
- 3a. Lack of fire, overgrazing, hail storms or other physical disturbance, drought. 3b. Prescribed fire, brush control, prescribed grazing.
- 4a. Seed dispersal of shrubs, persistent loss of grass cover, competition by shrubs, lack of fire. 4b. Brush control, range seeding -dependent on amount of grass (seed bank) remaining.
- 5. Loss of grass cover, seed dispersal of shrubs, competition by shrubs.
- 6. & 7. Brush control with continued loss of grass cover, soil sealing, erosion.

**State 1  
Historic Climax Plant Community**

**Community 1.1  
Historic Climax Plant Community**

State Containing Historic Climax Plant Community Grassland: The historic plant community has a grassland aspect, dominated by grasses with shrubs and half-shrubs

sparse and evenly distributed. Black grama, blue grama, and tobosa are the dominant grass species. There are a variety of perennial forbs and their production varies widely by season and year. Globemallow, verbena, groundsels, croton and filaree are forbs commonly found on this site. Fourwing saltbush and winterfat are two of the more palatable shrubs. The Loamy ecological site encompasses a wide variety of soils, with surface textures ranging from sandy loams to clay loams. Soil depths range from shallow to very deep and can include sub surface features such as calcic, petrocalcic, and gypsic horizons. These variations cause differences in plant community composition and dynamics. Black grama is found at highest densities on coarser textured sandy loams, with blue grama preferring finer textured loam and silt loam, and tobosa favoring lower landscape positions and loam to clay loam surface textures. Burrograss may often be the dominant grass species on silty soils, perhaps in part due to the seedlings ability to auger into and establish on physically crusted soils. Gypsum influenced soils typically have greater amounts of tobosa, burrograss, and ephedra. There is greater representation of sideoats and vine mesquite within the tobosa-blue grama community. Retrogression under continuous heavy grazing results in a decrease of black grama, blue grama, sideoats grama, plains bristlegrass, bush muhly, cane bluestem, vine mesquite, winterfat, and fourwing saltbush. Species such as burrograss, threeawns, sand dropseed, sand muhly, and broom snakeweed increase under continuous heavy grazing or prolonged periods of drought. Under continued retrogression burrograss can completely dominate the site. Creosotebush, tarbush, and mesquite, can also dominate. Cholla and prickly pear can increase on areas that are disturbed or overgrazed. Diagnosis: Tobosa, black grama, and blue grama are the dominant species. Grass cover is uniformly distributed with few large bare areas. Shrubs are sparse and evenly distributed. Slopes range from level to gently sloping and usually display limited evidence of active rills and gully formation if plant cover remains intact. Litter movement associated with overland flow is limited to smaller size class litter and short distances. Other shrubs include: yucca, mesquite, tarbush, cholla and creosote bush. Other forbs include: desert holly, scorpionweed, bladderpod, flax, nama, fleabane, Indianwheat, Indian blanket flower, groundcherry, deerstongue, and rayless goldenrod.

**Table 5. Annual production by plant type**

Plant Type	Low (Lb/Acre)	Representative Value (Lb/Acre)	High (Lb/Acre)
Grass/Grasslike	585	833	1080
Forb	39	55	72
Shrub/Vine	26	37	48
<b>Total</b>	<b>650</b>	<b>925</b>	<b>1200</b>

**Table 6. Ground cover**

Tree foliar cover	0%
Shrub/vine/liana foliar cover	0%

Grass/grasslike foliar cover	15-30%
Forb foliar cover	0%
Non-vascular plants	0%
Biological crusts	0%
Litter	25-30%
Surface fragments >0.25" and <=3"	0%
Surface fragments >3"	0%
Bedrock	0%
Water	0%
Bare ground	40-50%

**Figure 5. Plant community growth curve (percent production by month). NM2807, R042XC007NM Loamy HCPC. R042XC007NM Loamy HCPC Warm Season Plant Community..**

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
0	0	0	5	10	10	25	30	15	5	0	0

## State 2 Burrograss-Grassland

### Community 2.1 Burrograss-Grassland

Burrograss-Grassland: Changes in hydrology resulting in decreased available soil moisture, reduces grass cover and increases bare ground. Burrograss is the dominant grass. Tobosa cover is variable and can range from sizeable areas to small patches occupying only depressions or the lowest and wettest positions within the site. Threeawns, ear muhly, sand muhly, and fluffgrass occur at increased densities compared to the grassland state. Shrub densities may increase especially mesquite, creosotebush or tarbush. Retrogression within this state is characterized by a further decrease in grass cover and increased bare ground. Further deterioration of this site can result in the transition to a bare state or becoming shrub dominated. Diagnosis: Burrograss is the dominant species. Grass cover is no longer uniformly distributed, instead tending to be patchy with large areas of bare ground present. Physical crusts are present in bare areas reducing infiltration and suppressing seedling establishment by any grass species other than burrograss. Transition to Burrograss-Grassland (1a): Transitions from grassland to a burrograss-grassland state may occur due to changes in hydrology. Gullies, roads or obstructions that alter natural water flow patterns may cause this transition. Changes in surface hydrology may also occur due to overgrazing or drought. The reduction in grass cover promotes increased soil physical crusts and reduces infiltration. 5 Key indicators of

approach to transition: ? Diversion of overland flow resulting in decreased soil moisture. ? Increase in amount of burrograss cover ? Reduction in grass cover and increase in size and frequency of bare patches. ? Formation of physical crusts—indicating reduced infiltration. ? Evidence of litter movement—indicating loss or redistribution of organic matter. Transition back to Grassland (1b) The natural hydrology of the site must be returned. Culverts, turnouts, or rerouting roads may help re-establish natural overland flow, if roads or trails have altered the hydrology. Erosion control structures or shaping and filling gullies may help regain natural flow patterns and establish vegetation if the flow has been channeled. Breaking up physical crusts by soil disturbance may promote infiltration and seedling emergence. Allow natural revegetation to take place. Prescribed grazing will help ensure proper forage utilization and reduce grass loss due to grazing.

## **State 3**

### **Bare State**

#### **Community 3.1**

##### **Bare State**

Bare State: Extremely low ground cover, soil degradation and erosion characterize this state. Very little vegetation remains. Burrograss is the dominant grass and cover is extremely patchy. Physical soil crusts are extensive. Erosion and resource depletion increase as site degrades. Diagnosis: Very little cover remains. Erosion is evident by soil sealing, water flow patterns, pedestals or terracettes. Rills and gullies may be present and active. Transition to Bare State (2a): Extended drought, continuous heavy grazing, or other disturbance that severely depletes grass cover can effect this transition. As grass cover decreases, sheet flow and erosion increase, and physical soil crusts form, thereby further reducing infiltration. Key indicators of approach to transition: ? Continued reduction in grass cover. ? Increased soil surface sealing. ? Increased erosion. ? Reduced aggregate stability in bare areas. Transition back to Grassland (2b) Restore the hydrology, see (1a). With the extent of grass loss range seeding may be necessary. Utilizing livestock or mechanical means to break up the physical crusts may increase infiltration and aid seedling establishment. Prescribed grazing will help ensure adequate deferment period following seeding, and proper forage utilization once the grass stand is well established. The degree to which this site is capable of recovery depends on the restoration of hydrology, extent of degradation to soil resources, and adequate rainfall necessary to establish grasses.

## **State 4**

### **Grass/Succulent Mix**

#### **Community 4.1**

##### **Grass/Succulent Mix**

Grass / Succulent Mix: Increased representations of succulents characterize this site.

Increased densities of cholla or pricklypear is recognized as a management concern, but their impact on grass production is unclear. Light to medium cholla or prickly pear infestation doesn't seem to greatly reduce grass production, however it limits access to palatable grasses and interferes with livestock movement and handling. Tobosa and blue grama are the dominant species on this site. Retrogression within this site is characterized by a decrease in blue grama and an increase in succulents, tobosa and burrograss. Diagnosis: Cholla or prickly pear is found at increased densities. Grass cover is variable ranging from uniformly distributed to patchy with frequent areas of bare ground present. Tobosa or blue grama is the dominant grass species. Transition to Grass/Succulent Mix (3a): If fire was historically a part of desert grassland ecosystem and played a role in suppressing seedlings of shrubs and succulents, then fire suppression may favor the increase of succulents.<sup>1</sup> Heavy grazing by livestock or other physical disturbances may help disseminate seed and increase the establishment of succulents. Areas historically overgrazed by sheep are sometimes associated with higher densities of Succulents. Intense hailstorms can spread pricklypear by breaking off joints causing new plants to take root.<sup>3</sup> During severe drought perennial grass cover can decline significantly, leaving resources available for use by more drought tolerant succulents. Cholla and pricklypear are both adapted to and favored by drought due to the ability of their shallow, wide spreading root systems to absorb and store water.<sup>4</sup> Key indicators of approach to transition: ? Decrease or change in distribution of grass cover. ? Increase in amount of succulent seedlings. ? Increased cover of succulents. Transition back to Grassland (3b) Fire is an effective means of controlling cholla and prickly pear if adequate grass cover remains to carry fire.<sup>2</sup> Cholla greater than two feet tall or pricklypear with a large amount of pads (>15-20) are harder to kill. Chemical control is effective in controlling prickly pear and cholla; apply when growth starts in May. Hand grubbing is also effective if cholla or pricklypear is severed 2-4 inches below ground and care is taken not to let broken joints or pads take root. Stacking and burning piles and grubbing during winter or drought help keeps broken joints and pads from rooting. Prescribed grazing will help ensure proper forage utilization and sustain grass cover.

## **State 5 Shrub Dominated**

### **Community 5.1 Shrub Dominated**

Shrub Dominated: Increased shrub cover characterizes this state. Mesquite, creosotebush, and/or tarbush are the dominant shrub species. Burrograss or tobosa is the dominant grass species. Grass cover is decreased, typically patchy with large bare areas present; however, sometimes grass cover can remain relatively high for extended periods when associated with light to moderate infestations of mesquite. Variations in soil characteristics play a part in determining which shrub species increase. Mesquite is well adapted to a wide range of soil types, but increases more often on deep soils low in carbonates, that have a sandy surface overlying finer textured soils. Tarbush prefers finer textured, calcareous soils, usually in lower positions that receive some extra water.

Creosotebush is less tolerant of fine textured soils, preferring sandy, calcareous soils that have some gravel. Creosotebush also does well on soils that are shallow over caliche. Retrogression within this state is characterized by a decrease in tobosa, and an increase in burrograss. As the site continues to degrade shrub cover continues to increase and grass cover is severely reduced. Diagnosis: Mesquite, Creosotebush, and/or tarbush are the dominant shrubs. Blue grama and black grama cover is low or absent. Burrograss or tobosa are the dominant grasses. Typically grass cover is patchy with large interconnected bare areas present. Physical soil crusts are present, especially on silt loam surface soils.

Transition to Shrub Dominated (4a): Wildlife and livestock consume and disperse mesquite seeds. Flood events may wash creosote or tarbush seeds off adjacent gravelly sites onto the loamy site and supply adequate moisture for germination. Persistent loss of grass cover due to overgrazing or drought can cause large bare patches, providing competition free areas for shrub seedling establishment. As shrub cover increases, competition for soil resources, especially water, becomes a major factor in further reducing grass cover. Reduction of fire, due to either fire suppression policy or loss of adequate fine fuels may increase the probability of shrub encroachment. Increased soil surface physical crusts and associated decreased infiltration, may prevent the establishment of grass seedlings.

Transition to Shrub Dominated (5): The dispersal of creosotebush, tarbush or mesquite seed, combined with loss of grass cover and resource competition by shrubs may cause this transition. Key indicators of approach to transition: ? Decreased grass and litter cover. ? Increased bare patch size. ? Increased physical soil crusts. ? Increased amount of mesquite, creosotebush, or tarbush seedlings. ? Increased shrub cover. Transition back to Grassland (4b) Brush control will be necessary to remove shrubs and eliminate competition for resources necessary for grass establishment or reproduction. Seeding may be necessary on those sites where desired grass species are absent or very limited. Pitting and seeding may increase the chances of successful grass establishment. Prescribed grazing will help ensure adequate time is elapsed before grazing seeded area is allowed and proper forage utilization following seeding establishment.

Transition to Bare State (6): If grass cover on the shrub-dominated state is severely limited and shrubs are removed a bare state may result. This transition will depend on amount of grasses or seed remaining, whether site is seeded, or if seeding is successful.

Transition to Bare State (7): Removal of succulents and continued overgrazing or drought may cause loss of remaining grasses and erosion. Soil surface physical crusting may also be an important factor in inhibiting grass seedling establishment

### Additional community tables

Table 7. Community 1.1 plant community composition

Group	Common Name	Symbol	Scientific Name	Annual Production (Lb/Acre)	Foliar Cover (%)
<b>Grass/Grasslike</b>					
1	<b>Warm Season</b>			278–324	
	tobosagrass	PLMU3	<i>Pleuraphis mutica</i>	278–324	–

2	<b>warm season</b>			9-46	
	burrograss	SCBR2	<i>Scleropogon brevifolius</i>	9-46	-
3	<b>Warm Season</b>			231-278	
	black grama	BOER4	<i>Bouteloua eriopoda</i>	231-278	-
	blue grama	BOGR2	<i>Bouteloua gracilis</i>	231-278	-
4	<b>Warm Season</b>			28-46	
	sideoats grama	BOCU	<i>Bouteloua curtipendula</i>	28-46	-
5	<b>Warm Season</b>			46-93	
	bush muhly	MUPO2	<i>Muhlenbergia porteri</i>	46-93	-
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	46-93	-
6	<b>Warm Season</b>			9-28	
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	9-28	-
7	<b>Warm Season</b>			46-93	
	threeawn	ARIST	<i>Aristida</i>	46-93	-
	muhly	MUHLE	<i>Muhlenbergia</i>	46-93	-
	sand dropseed	SPCR	<i>Sporobolus cryptandrus</i>	46-93	-
8	<b>Warm Season</b>			28-46	
	Graminoid (grass or grass-like)	2GRAM	<i>Graminoid (grass or grass-like)</i>	28-46	-
<b>Shrub/Vine</b>					
9	<b>Shrub</b>			9-28	
	fourwing saltbush	ATCA2	<i>Atriplex canescens</i>	9-28	-
	jointfir	EPHED	<i>Ephedra</i>	9-28	-
	winterfat	KRLA2	<i>Krascheninnikovia lanata</i>	9-28	-
	cane bluestem	BOBA3	<i>Bothriochloa barbinodis</i>	5-24	-
	Arizona cottontop	DICA8	<i>Digitaria californica</i>	5-24	-
	plains bristlegrass	SEVU2	<i>Setaria vulpiseta</i>	5-24	-
10	<b>Shrub</b>			9-28	
	javelina bush	COER5	<i>Condalia ericoides</i>	9-28	-
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	9-28	-
	Grass, annual	2GA	<i>Grass, annual</i>	5-15	-
11	<b>Shrubs</b>			9-28	
	Shrub (>.5m)	2SHRUB	<i>Shrub (&gt;.5m)</i>	9-28	-
<b>Forb</b>					
12	<b>Forb</b>			9-46	

	threadleaf ragwort	SEFLF	<i>Senecio flaccidus</i> var. <i>flaccidus</i>	9-46	-
	globemallow	SPHAE	<i>Sphaeralcea</i>	9-46	-
	verbena	VEPO4	<i>Verbena polystachya</i>	9-46	-
	broom snakeweed	GUSA2	<i>Gutierrezia sarothrae</i>	5-15	-
	pricklypear	OPUNT	<i>Opuntia</i>	5-15	-
13	<b>Forb</b>			9-28	
	croton	CROTO	<i>Croton</i>	9-28	-
	woolly groundsel	PACA15	<i>Packera cana</i>	9-28	-
14	<b>Forb</b>			9-28	
	Goodding's tansyaster	MAPIG2	<i>Machaeranthera pinnatifida</i> ssp. <i>gooddingii</i> var. <i>gooddingii</i>	9-28	-
	woolly paperflower	PSTA	<i>Psilostrophe tagetina</i>	9-28	-
15	<b>Forb</b>			9-28	
	redstem stork's bill	ERCI6	<i>Erodium cicutarium</i>	9-28	-
	Texas stork's bill	ERTE13	<i>Erodium texanum</i>	9-28	-
16	<b>Forb</b>			9-28	
	Forb (herbaceous, not grass nor grass-like)	2FORB	<i>Forb (herbaceous, not grass nor grass-like)</i>	9-28	-

## Animal community

This site provides habitats which support a resident animal community that is characterized by pronghorn antelope, black-tailed jackrabbit, black tailed prairie dog, yellow-faced pocket gopher, banner-tailed kangaroo rat, hispid cotton rat, swift fox, burrowing owl, horned lark, mockingbird, meadowlark, mourning dove, scaled quail, Great Plains toad, plains spadefoot toad, prairie rattlesnake and western coachwhip snake.

## Hydrological functions

The runoff curve numbers are determined by field investigations using hydraulic cover conditions and hydrologic soil groups.

Hydrologic Interpretations  
 Soil Series Hydrologic Group  
 Atoka C  
 Bigetty B  
 Ratliff B  
 Reyab B

Holloman B  
Largo B  
Holloman B  
Bigetty B  
Berino B  
Reagan B  
Reakor B  
Reeves B  
Russler C

## Recreational uses

This site offers limited potential for hiking, horseback riding, nature observation and photography. Game bird, antelope and predator hunting are also limited.

## Wood products

This site has no potential for wood products

## Other products

This site is suitable for grazing by all kinds and classes of livestock, during all seasons of the year. Under retrogression, such plants as black grama, blue grama, sideoats grama, bush muhly, plains bristlegrass, Arizona cottontop, fourwing saltbush and winterfat decrease and there is an increase in burrograss, threeawns, sand dropseed, muhlys, broom snakeweed and javilinabush. Under continued retrogression, burrograss can completely dominate the site. Creosotebush, mesquite, and tarbush can also dominate. Grazing management alone will not improve the site in the above situation. This site is well suited to a system of management that rotates the season of use.

## Other information

Guide to Suggested Initial Stocking Rate Acres per Animal Unit Month

Similarity Index Ac/AUM

100 - 76 3.0 – 4.2

75 – 51 4.1 – 5.5

50 – 26 5.3 – 7.0

25 – 0 7.1 +

## Inventory data references

Other References:

Data collection for this site was done in conjunction with the progressive soil surveys within the Southern Desertic Basins, Plains and Mountains, Major Land Resource Areas of

New Mexico. This site has been mapped and correlated with soils in the following soil surveys. Eddy County Lea County and Chavez County.

### Other references

Literature References:

1. Brooks, M.L., AND D.A. Pyke. 2001. Invasive plants and fire in the deserts of North America. Pages 1–14 in K.E.M. Galley and T.P. Wilson (eds.). Proceedings of the Invasive Species Workshop: the Role of Fire in the Control and Spread of Invasive Species.
2. Bunting, S.C., H.A. Wright, and L.F. Neuenschwander. 1980. Long-term effects of fire on cactus in the Southern Mixed Prairie of Texas. J. Range. Manage. 33: 85-88.
3. Laycock, W.A. 1982. Hail as an ecological factor in the increase of prickly pear cactus. p. 359-361. In: J.A. Smith and V.W. Hays (eds.) Proc. XIV Int. Grassland Congr. Westview Press, Boulder, Colo.
4. Vallentine, J.F. 1989. Range Developments and Improvements. 3rd Edition. Academic Press. San Diego, California.
5. U.S. Department of Agriculture, Natural Resources Conservation Service. 2001. Soil Quality Information Sheet. Rangeland Soil Quality—Physical and Biological Soil Crusts. Rangeland Sheet 6, [Online]. Available: <http://www.statlab.iastate.edu/survey/SQI/range.html>

### Contributors

David Trujillo  
Don Sylvester

### Rangeland health reference sheet

Interpreting Indicators of Rangeland Health is a qualitative assessment protocol used to determine ecosystem condition based on benchmark characteristics described in the Reference Sheet. A suite of 17 (or more) indicators are typically considered in an assessment. The ecological site(s) representative of an assessment location must be known prior to applying the protocol and must be verified based on soils and climate. Current plant community cannot be used to identify the ecological site.

Author(s)/participant(s)	
Contact for lead author	

Date	
Approved by	
Approval date	
Composition (Indicators 10 and 12) based on	Annual Production

## Indicators

**1. Number and extent of rills:**

---

**2. Presence of water flow patterns:**

---

**3. Number and height of erosional pedestals or terracettes:**

---

**4. Bare ground from Ecological Site Description or other studies (rock, litter, lichen, moss, plant canopy are not bare ground):**

---

**5. Number of gullies and erosion associated with gullies:**

---

**6. Extent of wind scoured, blowouts and/or depositional areas:**

---

**7. Amount of litter movement (describe size and distance expected to travel):**

---

**8. Soil surface (top few mm) resistance to erosion (stability values are averages - most sites will show a range of values):**

---

**9. Soil surface structure and SOM content (include type of structure and A-horizon color and thickness):**

---

10. **Effect of community phase composition (relative proportion of different functional groups) and spatial distribution on infiltration and runoff:**

---

11. **Presence and thickness of compaction layer (usually none; describe soil profile features which may be mistaken for compaction on this site):**

---

12. **Functional/Structural Groups (list in order of descending dominance by above-ground annual-production or live foliar cover using symbols: >>, >, = to indicate much greater than, greater than, and equal to):**

Dominant:

Sub-dominant:

Other:

Additional:

---

13. **Amount of plant mortality and decadence (include which functional groups are expected to show mortality or decadence):**

---

14. **Average percent litter cover (%) and depth ( in):**

---

15. **Expected annual annual-production (this is TOTAL above-ground annual-production, not just forage annual-production):**

---

16. **Potential invasive (including noxious) species (native and non-native). List species which BOTH characterize degraded states and have the potential to become a dominant or co-dominant species on the ecological site if their future establishment and growth is not actively controlled by management interventions. Species that become dominant for only one to several years (e.g., short-term response to drought or wildfire) are not invasive plants. Note that unlike other indicators, we are describing what is NOT expected in the reference state for the ecological site:**

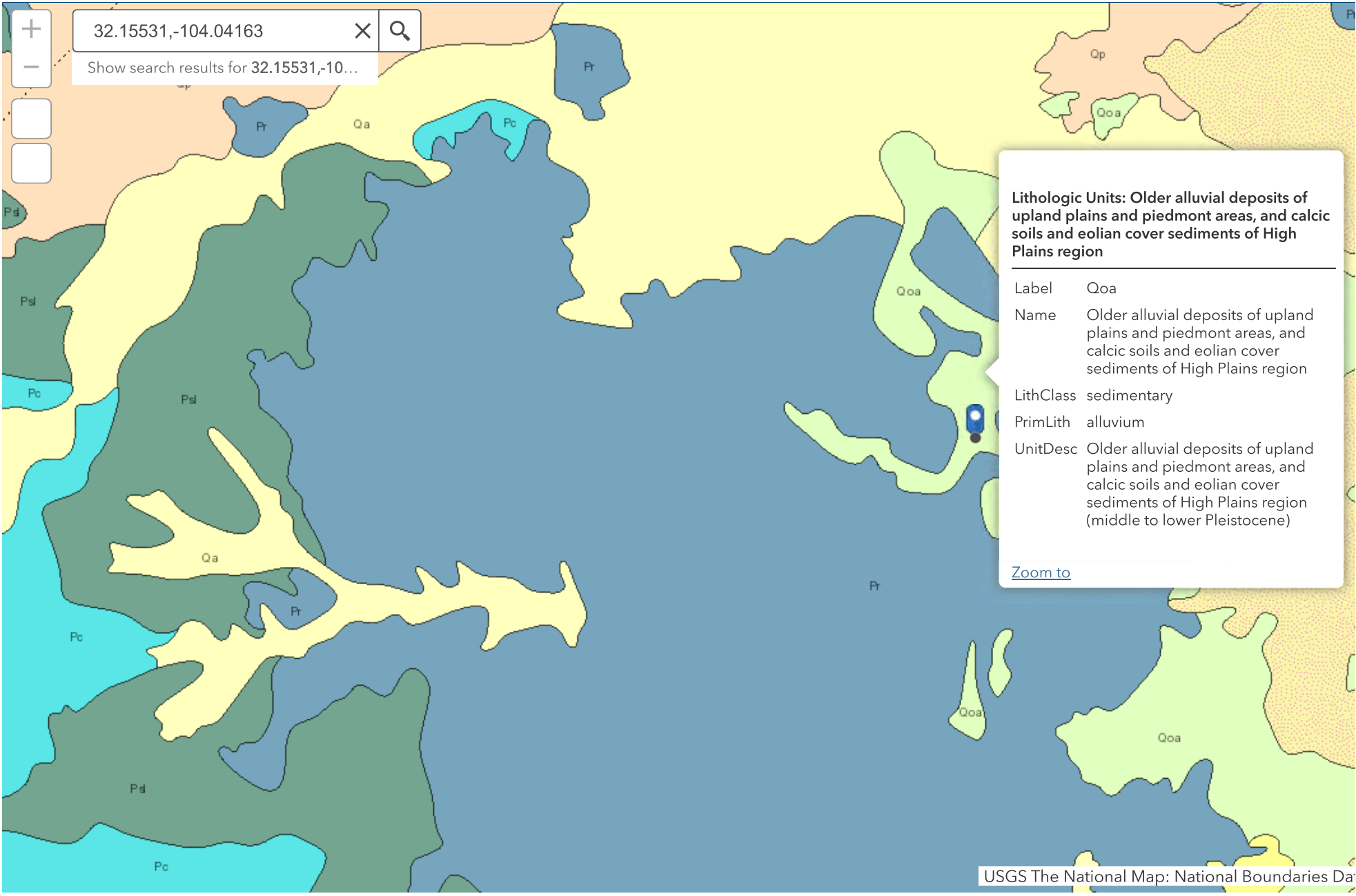
---

17. **Perennial plant reproductive capability:**

---



# NMBGMR Interactive Resources Map



32.15531, -104.04163 X Q

Show search results for 32.15531, -10...

**Lithologic Units: Older alluvial deposits of upland plains and piedmont areas, and calcic soils and eolian cover sediments of High Plains region**

---

Label	Qoa
Name	Older alluvial deposits of upland plains and piedmont areas, and calcic soils and eolian cover sediments of High Plains region
LithClass	sedimentary
PrimLith	alluvium
UnitDesc	Older alluvial deposits of upland plains and piedmont areas, and calcic soils and eolian cover sediments of High Plains region (middle to lower Pleistocene)

[Zoom to](#)

2mi

-104.085 32.165 Degrees

USGS The National Map: National Boundaries Da

## APPENDIX B – Daily Field and Sampling Reports



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Inspection Date:	<u>10/2/2024</u>
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	Report Run Date:	<u>10/4/2024 1:37 AM</u>
Client Contact Name:	<u>Nathan Rose</u>	API #:	<u></u>
Client Contact Phone #:	<u>432 282 5328</u>		
Unique Project ID	<u></u>	Project Owner:	<u></u>
Project Reference #	<u></u>	Project Manager:	<u></u>

### Summary of Times

Arrived at Site	<u>10/2/2024 8:05 AM</u>
Departed Site	<u>10/2/2024 4:20 PM</u>

# Daily Site Visit Report



## Field Notes

**14:48** Hydrovac to expose underground lines to start delineation excavation

## Next Steps & Recommendations

- 1 Find the rest of the exposed lines to keep delineating



# Daily Site Visit Report

## Site Photos

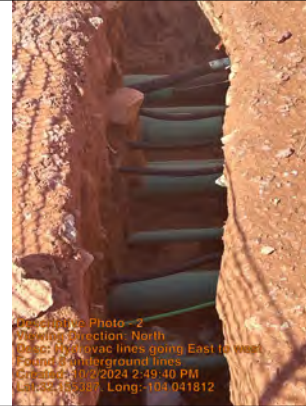
**Viewing Direction: South**



Descriptive Photo - 1  
Viewing Direction: South  
Desc: Hydrovac lines going East to West  
Found 8 underground lines  
Created: 10/2/2024 2:49:40 PM  
Lat: 32.155431, Long: -104.041812

Hydrovac lines going East to west  
Found 8 underground lines

**Viewing Direction: North**



Descriptive Photo - 2  
Viewing Direction: North  
Desc: Hydrovac lines going East to West  
Found 8 underground lines  
Created: 10/2/2024 2:49:40 PM  
Lat: 32.155431, Long: -104.041812

Hydrovac lines going East to west  
Found 8 underground lines

**Viewing Direction: West**



Descriptive Photo - 3  
Viewing Direction: West  
Desc: Hydrovac lines going East to west turning  
Created: 10/2/2024 2:51:28 PM  
Lat: 32.155438, Long: -104.042973

Hydrovac lines going East to west turning to the North by compressor

**Viewing Direction: South**





Descriptive Photo - 4  
Viewing Direction: South  
Desc: TT24-01  
Created: 10/2/2024 1:54:28 PM  
Lat: 32.155498, Long: -104.047746


Delineation on TT24-01



# Daily Site Visit Report

<b>Viewing Direction: North</b>
 <p><small>Descriptive Photo - 5 Viewing Direction: North Desc: BH24-02 Created: 10/2/2024 2:59:29 PM Lat:32.165897, Long:-104.041728</small></p>
TT24-02

<b>Viewing Direction: East</b>
 <p><small>Descriptive Photo - 6 Viewing Direction: East Desc: Hydrovac lines going East to west turning to the North by compressor Created: 10/2/2024 3:18:57 PM Lat:32.155633, Long:-104.0415</small></p>
Hydrovac lines going East to west turning to the North by compressor

<b>Viewing Direction: North</b>
 <p><small>Descriptive Photo - 7 Viewing Direction: North Desc: BH24-03 Created: 10/2/2024 3:18:57 PM Lat:32.155633, Long:-104.0415</small></p>
TT24-03

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Riley Plogger

**Signature:**

A handwritten signature in black ink, appearing to be 'Riley Plogger', written over a thin horizontal line. The signature is stylized and cursive.



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Inspection Date:	<u>10/3/2024</u>
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	Report Run Date:	<u>10/4/2024 1:51 AM</u>
Client Contact Name:	<u>Nathan Rose</u>	API #:	<u></u>
Client Contact Phone #:	<u>432 282 5328</u>		
Unique Project ID	<u></u>	Project Owner:	<u></u>
Project Reference #	<u></u>	Project Manager:	<u></u>

### Summary of Times

Arrived at Site	<u>10/3/2024 8:15 AM</u>
Departed Site	<u>10/3/2024 4:00 PM</u>

# Daily Site Visit Report



## Field Notes

**14:41** Finish Hydrovac excavation by compressors and North by separators **14:41** Finish delineation on TT24-03 to 09

## Next Steps & Recommendations

- 1 Send off samples to lab for analysis and get excavation map made



# Daily Site Visit Report

## Site Photos

Viewing Direction: North



Descriptive Photo - 1  
Viewing Direction: North  
Date: 01/24/24 @ 8:37  
Created: 1/24/2024 2:46:17 PM  
Lat: 32.155903, Long: -104.041843

TT24-03 @ 8'

Viewing Direction: North



Descriptive Photo - 2  
Viewing Direction: North  
Date: 01/24/24 @ 8:38  
Created: 1/24/2024 2:46:18 PM  
Lat: 32.155904, Long: -104.041843

TT24-03 @ 2'

Viewing Direction: South



Descriptive Photo - 3  
Viewing Direction: South  
Date: 01/24/24 @ 8:41  
Created: 1/24/2024 2:46:11 PM  
Lat: 32.155904, Long: -104.041843

TT24-04 @ 2'

Viewing Direction: West



Descriptive Photo - 4  
Viewing Direction: West  
Date: 01/24/24 @ 8:45  
Created: 1/24/2024 2:46:08 PM  
Lat: 32.155904, Long: -104.042023

TT24-05 @ 8'



# Daily Site Visit Report

**Viewing Direction: West**

Descriptive Photo - 6  
Viewing Direction: West  
Date: 10/3/2024 2:47:20 PM  
Created: 10/3/2024 2:47:20 PM  
Lat:32.168804, Long:-104.041828

TT24-06 @ 8'

**Viewing Direction: West**

Descriptive Photo - 13  
Viewing Direction: West  
Date: 10/3/2024 2:47:20 PM  
Created: 10/3/2024 2:47:20 PM  
Lat:32.168804, Long:-104.041828

TT24-07 @ 2'

**Viewing Direction: South**

Descriptive Photo - 7  
Viewing Direction: South  
Date: 10/3/2024 2:47:20 PM  
Created: 10/3/2024 2:47:20 PM  
Lat:32.168804, Long:-104.041744

TT24-09 @ 2'

**Viewing Direction: North**

Descriptive Photo - 8  
Viewing Direction: North  
Date: 10/3/2024 2:48:33 PM  
Created: 10/3/2024 2:48:33 PM  
Lat:32.168804, Long:-104.041828

Hydro vac lines that were windowed near separator. 14 total  
8 Gas lines  
5 electrical  
1 ground



# Daily Site Visit Report

<b>Viewing Direction: South</b>		
	 <p style="font-size: small; color: orange; text-align: center;">Photograph taken by Inspector [Name] on Date: 10/4/24 @ 1:51 PM Project: TT24-08 @ 2' @ 2' Lot: 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100</p>	
TT24-08 @ 2'		

# Daily Site Visit Report



Daily Site Visit Signature

Inspector: Riley Plogger

Signature:

A handwritten signature in black ink, appearing to be 'Riley Plogger', written over a horizontal line.

Signature



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Incident ID #:	_____
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	API #:	_____
Inspection Date:	<u>10/16/2025</u>		_____

## Summary of Times

Arrived at Site	<u>10/16/2025 2:00 PM</u>
Departed Site	<u>10/16/2025 4:13 PM</u>

## Field Notes

- 14:56** Continued hydro vac 5' excavation along buried lines.
- 14:57** Continued hydro vac 4' excavation around compressor stations.
- 14:57** Resumed excavation on northwest corner on release extent to 7' bgs.

## Next Steps & Recommendations

- 1** Continue hydro vac.
- 2** Continue excavations.
- 3** Sample.



# Daily Site Visit Report

## Site Photos

Viewing Direction: North



Descriptive Photo - 1  
Viewing Direction: North  
Desc: 5' Ao hydro vac excavation along buried lines  
Created: 10/16/2025 2:59:23 PM  
Lat: 32.155599, Long: -104.042290

5' hydro vac excavation along buried lines.

Viewing Direction: East



Descriptive Photo - 2  
Viewing Direction: East  
Desc: 4' Ao hydro vac excavation around compressors  
Created: 10/16/2025 3:01:06 PM  
Lat: 32.155599, Long: -104.042290

4' hydro vac excavation around compressors.

Viewing Direction: Northeast



Descriptive Photo - 3  
Viewing Direction: Northeast  
Desc: View of 7' Ao excavation on northwest corner on release extent  
Created: 10/16/2025 3:00:56 PM  
Lat: 32.155599, Long: -104.042327

View of 7' excavation on northwest corner on release extent.

Viewing Direction: Southeast



Descriptive Photo - 4  
Viewing Direction: Southeast  
Desc: View of 7' Ao excavation on northwest corner on release extent  
Created: 10/16/2025 3:01:53 PM  
Lat: 32.155599, Long: -104.042327

View of 7' excavation on northwest corner on release extent.



# Daily Site Visit Report

Viewing Direction: South



View of 7' excavation on northwest corner on release extent.

Viewing Direction: Northeast



View of contaminated material stockpile inside release footprint.

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Gilberto Sanchez

**Signature:**

  
Signature



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Incident ID #:	_____
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	API #:	_____
Inspection Date:	<u>10/23/2025</u>		_____

## Summary of Times

Arrived at Site	<u>10/23/2025 7:09 AM</u>
Departed Site	<u>10/23/2025 3:35 PM</u>

## Field Notes

- 12:54** Continue hydro vac 4' excavating east of compressor.
- 12:54** Continue hydro vac 5' excavating along buried lines.
- 12:55** Excavated TT-6
- 12:55** Continued excavation.
- 12:56** Field screen.

## Next Steps & Recommendations

- 1 Continue excavations.
- 2 Field screen.



# Daily Site Visit Report

## Site Photos

Viewing Direction: Southeast



Site Photo - 1  
Viewing Direction: Southeast  
Date: 11/2  
Created: 10/23/2025 1:42:31 PM  
Lat: 33.189479, Long: -104.841728

TT-6

Viewing Direction: West



Site Photo - 2  
Viewing Direction: West  
Date: 11/2  
Created: 10/23/2025 1:42:31 PM  
Lat: 33.189479, Long: -104.841728

View of 14' excavation.

Viewing Direction: South



Site Photo - 3  
Viewing Direction: South  
Date: 11/2  
Created: 10/23/2025 1:42:31 PM  
Lat: 33.189479, Long: -104.841728

Continued 5' hydro vac excavation along buried lines.

Viewing Direction: West



Site Photo - 4  
Viewing Direction: West  
Date: 11/2  
Created: 10/23/2025 1:57:36 PM  
Lat: 33.189479, Long: -104.841728

Continued 4' excavation northeast of compressor.



# Daily Site Visit Report

Viewing Direction: Southwest



View of 14' excavation.

Viewing Direction: Northeast



Hauling out excavated material.

Viewing Direction: North



View of excavations from the south side.

Viewing Direction: Northeast



View of excavated material stockpile.

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Gilberto Sanchez

**Signature:**

  
Signature



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Incident ID #:	_____
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	API #:	_____
Inspection Date:	<u>11/4/2025</u>		_____

## Summary of Times

Arrived at Site	<u>11/4/2025 6:59 AM</u>
Departed Site	<u>11/4/2025 3:39 PM</u>

## Field Notes

- 7:11** Continue 5.5' hydro vac excavation along buried lines.
- 7:11** Continue 10' excavation on south side of release extent.
- 14:40** Portion of the 10' excavation was backfilled to reconnect well lines.

## Next Steps & Recommendations

- 1** Continue hydro vac excavation.
- 2** Confirmation sampling.



# Daily Site Visit Report

## Site Photos

Viewing Direction: North



5.5' hydro vac excavation along buried lines.

Viewing Direction: North



View of excavations from the south side.

Viewing Direction: South



View of 10' excavation in progress.

Viewing Direction: Southwest



View of 10' excavation in progress.



# Daily Site Visit Report

Viewing Direction: Southwest



Descriptive Photo - 5  
Viewing Direction: Southwest  
Desc: View of 10.0' excavation in progress  
Created: 11/4/2025 9:42:01 AM  
Lat: 33.15116, Long: -104.041748

View of 10' excavation in progress.

Viewing Direction: North



Descriptive Photo - 6  
Viewing Direction: North  
Desc: View of 10.0' excavation backfill in progress  
Created: 11/4/2025 9:42:01 AM  
Lat: 33.15116, Long: -104.041748

View of 10' excavation backfill in progress.

Viewing Direction: East



Descriptive Photo - 7  
Viewing Direction: East  
Desc: View of 10.0' excavation backfill in progress  
Created: 11/4/2025 1:38:28 PM  
Lat: 33.15206, Long: -104.042800

View of 10' excavation backfill in progress.

Viewing Direction: Northwest



Descriptive Photo - 8  
Viewing Direction: Northwest  
Desc: View of 5.5' hydro vac excavation along buried lines  
Created: 11/4/2025 1:41:12 PM  
Lat: 33.155478, Long: -104.042650

View of 5.5' hydro vac excavation along buried lines.

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Gilberto Sanchez

**Signature:**

  
Signature



# Daily Site Visit Report

Client:	<u>Coterra Energy Inc.</u>	Incident ID #:	_____
Site Location Name:	<u>Riverbend 12-13 Federal Com 20H</u>	API #:	_____
Inspection Date:	<u>12/10/2025</u>		_____

## Summary of Times

Arrived at Site	<u>12/10/2025 9:00 AM</u>
Departed Site	<u>12/10/2025 10:00 AM</u>

## Field Notes

- 9:26** Site completion documentation.
- 9:26** Collected sample where excavated stockpile and pit were.

## Next Steps & Recommendations

- 1** Report.



# Daily Site Visit Report

## Site Photos

Viewing Direction: West



Descriptive Photo - 1  
Viewing Direction: West  
Desc: View of completed work  
Created: 12/10/2025 9:28:41 AM  
Lat:32.185388, Long:-104.041738

Backfill completed.

Viewing Direction: North



Descriptive Photo - 2  
Viewing Direction: North  
Desc: View of completed work  
Created: 12/10/2025 9:28:59 AM  
Lat:32.185388, Long:-104.041738

Backfill completed.

Viewing Direction: West



Descriptive Photo - 3  
Viewing Direction: West  
Desc: View of completed work  
Created: 12/10/2025 9:29:07 AM  
Lat:32.185388, Long:-104.041738

Backfill completed.

Viewing Direction: West



Descriptive Photo - 4  
Viewing Direction: West  
Desc: View of completed work  
Created: 12/10/2025 9:30:51 AM  
Lat:32.185388, Long:-104.041738

Backfill completed.



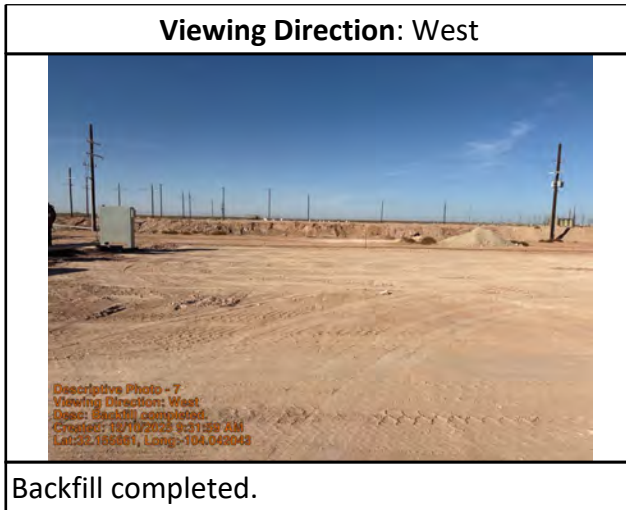
# Daily Site Visit Report



Backfill completed.



Backfill completed.



Backfill completed.



Backfill completed.

# Daily Site Visit Report



Daily Site Visit Signature

**Inspector:** Gilberto Sanchez

**Signature:**

A handwritten signature in black ink, appearing to be 'GS', written over a horizontal line. The word 'Signature' is printed in small text below the line.

## **APPENDIX C – Laboratory Data Reports and Chain of Custody Forms**

Report to:  
Chad Hensley



# envirotech

*Practical Solutions for a Better Tomorrow*

## Analytical Report

Vertex Resource Services Inc.

Project Name: River Bend 12-13 Fed 20H

Work Order: E410057

Job Number: 19031-0001

Received: 10/8/2024

Revision: 1

Report Reviewed By:

Walter Hinchman  
Laboratory Director  
10/14/24

5796 U.S. Hwy 64  
Farmington, NM 87401

Phone: (505) 632-1881  
Envirotech-inc.com



Envirotech Inc. certifies the test results meet all requirements of TNI unless noted otherwise.  
Statement of Data Authenticity: Envirotech Inc, attests the data reported has not been altered in any way.  
Partial or incomplete reproduction of this report is prohibited, unless approved by Envirotech Inc.  
Envirotech Inc, holds the Utah TNI certification NM00979 for data reported.  
Envirotech Inc, holds the Texas TNI certification T104704557 for data reported.



Date Reported: 10/14/24

Chad Hensley  
3101 Boyd Drive  
Carlsbad, NM 88220

Project Name: River Bend 12-13 Fed 20H  
Workorder: E410057  
Date Received: 10/8/2024 5:00:00AM

Chad Hensley,

Thank you for choosing Envirotech, Inc. as your analytical testing laboratory for the sample(s) received on, 10/8/2024 5:00:00AM, under the Project Name: River Bend 12-13 Fed 20H.

The analytical test results summarized in this report with the Project Name: River Bend 12-13 Fed 20H apply to the individual samples collected, identified and submitted bearing the project name on the enclosed chain-of-custody. Subcontracted sample analyses not conducted by Envirotech, Inc., are attached in full as issued by the subcontract laboratory.

Please review the Chain-of-Custody (COC) and Sample Receipt Checklist (SRC) for any issues regarding sample receipt temperature, containers, preservation etc. To best understand your test results, review the entire report summarizing your sample data and the associated quality control batch data.

All reported data in this analytical report were analyzed according to the referenced method(s) and are in compliance with the latest NELAC/TNI standards, unless otherwise noted. Samples or analytical quality control parameters not meeting specific QC criteria are qualified with a data flag. Data flag definitions are located in the Notes and Definitions section of this analytical report.

If you have any questions concerning this report, please feel free to contact Envirotech, Inc.

Respectfully,

**Walter Hinchman**  
Laboratory Director  
Office: 505-632-1881  
Cell: 775-287-1762  
[whinchman@envirotech-inc.com](mailto:whinchman@envirotech-inc.com)

**Raina Schwanz**  
Laboratory Administrator  
Office: 505-632-1881  
[rainaschwanz@envirotech-inc.com](mailto:rainaschwanz@envirotech-inc.com)

Field Offices:

**Southern New Mexico Area**

**Lynn Jarboe**  
Laboratory Technical Representative  
Office: 505-421-LABS(5227)  
Cell: 505-320-4759  
[ljjarboe@envirotech-inc.com](mailto:ljjarboe@envirotech-inc.com)

**Michelle Gonzales**  
Client Representative  
Office: 505-421-LABS(5227)  
Cell: 505-947-8222  
[mgonzales@envirotech-inc.com](mailto:mgonzales@envirotech-inc.com)

Envirotech Web Address: [www.envirotech-inc.com](http://www.envirotech-inc.com)

## Table of Contents

Title Page	1
Cover Page	2
Table of Contents	3
Sample Summary	5
Sample Data	6
TT24 - 01 @ 1'	6
TT24 - 01 @ 2'	7
TT24 - 02 @ 1'	8
TT24 - 02 @ 2'	9
TT24 - 03 @ 1'	10
TT24 - 03 @ 2'	11
TT24 - 03 @ 4'	12
TT24 - 03 @ 6'	13
TT24 - 03 @ 8'	14
TT24 - 04 @ 1'	15
TT24 - 04 @ 2'	16
TT24 - 05 @ 1'	17
TT24 - 05 @ 2'	18
TT24 - 05 @ 4'	19
TT24 - 05 @ 6'	20
TT24 - 05 @ 8'	21
TT24 - 06 @ 1'	22
TT24 - 06 @ 2'	23
TT24 - 06 @ 4'	24
TT24 - 06 @ 6'	25

## Table of Contents (continued)

TT24 - 06 @ 8'	26
TT24 - 07 @ 1'	27
TT24 - 07 @ 2'	28
TT24 - 08 @ 1'	29
TT24 - 08 @ 2'	30
TT24 - 09 @ 1'	31
TT24 - 09 @ 2'	32
QC Summary Data	33
QC - Volatile Organics by EPA 8021B	33
QC - Nonhalogenated Organics by EPA 8015D - GRO	35
QC - Nonhalogenated Organics by EPA 8015D - DRO/ORO	37
QC - Anions by EPA 300.0/9056A	39
Definitions and Notes	41
Chain of Custody etc.	42

### Sample Summary

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/24 07:56
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Client Sample ID	Lab Sample ID	Matrix	Sampled	Received	Container
TT24 - 01 @ 1'	E410057-01A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 01 @ 2'	E410057-02A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 02 @ 1'	E410057-03A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 02 @ 2'	E410057-04A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 03 @ 1'	E410057-05A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 03 @ 2'	E410057-06A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 03 @ 4'	E410057-07A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 03 @ 6'	E410057-08A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 03 @ 8'	E410057-09A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 04 @ 1'	E410057-10A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 04 @ 2'	E410057-11A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 05 @ 1'	E410057-12A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 05 @ 2'	E410057-13A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 05 @ 4'	E410057-14A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 05 @ 6'	E410057-15A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 05 @ 8'	E410057-16A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 06 @ 1'	E410057-17A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 06 @ 2'	E410057-18A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 06 @ 4'	E410057-19A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 06 @ 6'	E410057-20A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 06 @ 8'	E410057-21A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 07 @ 1'	E410057-22A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 07 @ 2'	E410057-23A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 08 @ 1'	E410057-24A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 08 @ 2'	E410057-25A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 09 @ 1'	E410057-26A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.
TT24 - 09 @ 2'	E410057-27A	Soil	10/04/24	10/08/24	Glass Jar, 2 oz.

### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 01 @ 1'**  
**E410057-01**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.6 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		119 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	ND	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 01 @ 2'**

**E410057-02**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.4 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		116 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	ND	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 02 @1'**

**E410057-03**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.5 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	2010	20.0	1	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 02 @ 2'**

**E410057-04**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.1 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		109 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	ND	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 03 @ 1'**

**E410057-05**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.2 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		112 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	7120	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 03 @ 2'**

**E410057-06**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.8 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	5090	40.0	2	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 03 @ 4'**

**E410057-07**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		107 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.1 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	63.1	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	3400	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 03 @ 6'**

**E410057-08**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.2 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	922	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 03 @ 8'**

**E410057-09**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.2 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	398	40.0	2	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 04 @ 1'**

**E410057-10**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.6 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	259	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 04 @ 2'**

**E410057-11**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.8 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	279	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 05 @ 1'**

**E410057-12**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.4 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	7510	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 05 @ 2'**

**E410057-13**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		103 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.7 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		113 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	7020	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 05 @ 4'**

**E410057-14**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		104 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.0 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	57.4	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	65.3	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	3340	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 05 @ 6'**

**E410057-15**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.9 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	3350	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 05 @ 8'**

**E410057-16**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.7 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.4 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		110 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	630	40.0	2	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 06 @ 1'**

**E410057-17**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		99.7 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.6 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		113 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	5730	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 06 @ 2'**

**E410057-18**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.8 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	59.6	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	69.7	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		114 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	8280	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 06 @ 4'**

**E410057-19**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		94.3 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	8020	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 06 @ 6'**

**E410057-20**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Benzene	ND	0.0250	1	10/08/24	10/10/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/10/24	
Toluene	ND	0.0250	1	10/08/24	10/10/24	
o-Xylene	ND	0.0250	1	10/08/24	10/10/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/10/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/10/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		100 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441015
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/10/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.4 %	70-130	10/08/24	10/10/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441020
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/09/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/09/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	10/08/24	10/09/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: DT		Batch: 2441018
Chloride	4780	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 06 @ 8'**

**E410057-21**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.3 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	890	200	10	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 07 @ 1'**

**E410057-22**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		95.7 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		120 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	1420	100	5	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 07 @ 2'**

**E410057-23**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.3 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		111 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	ND	20.0	1	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 08 @ 1'**

**E410057-24**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/08/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/08/24	
Toluene	ND	0.0250	1	10/08/24	10/08/24	
o-Xylene	ND	0.0250	1	10/08/24	10/08/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/08/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/08/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		97.7 %	70-130	10/08/24	10/08/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/08/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.5 %	70-130	10/08/24	10/08/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		115 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	3730	40.0	2	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 08 @ 2'**

**E410057-25**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		101 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.0 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		116 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	1030	20.0	1	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 09 @ 1'**

**E410057-26**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		97.8 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		116 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	130	40.0	2	10/08/24	10/08/24	



### Sample Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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**TT24 - 09 @ 2'**

**E410057-27**

Analyte	Result	Reporting Limit	Dilution	Prepared	Analyzed	Notes
<b>Volatile Organics by EPA 8021B</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Benzene	ND	0.0250	1	10/08/24	10/09/24	
Ethylbenzene	ND	0.0250	1	10/08/24	10/09/24	
Toluene	ND	0.0250	1	10/08/24	10/09/24	
o-Xylene	ND	0.0250	1	10/08/24	10/09/24	
p,m-Xylene	ND	0.0500	1	10/08/24	10/09/24	
Total Xylenes	ND	0.0250	1	10/08/24	10/09/24	
<i>Surrogate: 4-Bromochlorobenzene-PID</i>		102 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - GRO</b>	mg/kg	mg/kg		Analyst: CG		Batch: 2441016
Gasoline Range Organics (C6-C10)	ND	20.0	1	10/08/24	10/09/24	
<i>Surrogate: 1-Chloro-4-fluorobenzene-FID</i>		96.6 %	70-130	10/08/24	10/09/24	
<b>Nonhalogenated Organics by EPA 8015D - DRO/ORO</b>	mg/kg	mg/kg		Analyst: NV		Batch: 2441021
Diesel Range Organics (C10-C28)	ND	25.0	1	10/08/24	10/08/24	
Oil Range Organics (C28-C36)	ND	50.0	1	10/08/24	10/08/24	
<i>Surrogate: n-Nonane</i>		118 %	50-200	10/08/24	10/08/24	
<b>Anions by EPA 300.0/9056A</b>	mg/kg	mg/kg		Analyst: JM		Batch: 2441028
Chloride	ND	100	5	10/08/24	10/08/24	



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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#### Blank (2441015-BLK1)

Prepared: 10/08/24 Analyzed: 10/10/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	8.02		8.00		100	70-130			

#### LCS (2441015-BS1)

Prepared: 10/08/24 Analyzed: 10/10/24

Benzene	5.09	0.0250	5.00		102	70-130			
Ethylbenzene	4.92	0.0250	5.00		98.4	70-130			
Toluene	5.02	0.0250	5.00		100	70-130			
o-Xylene	4.93	0.0250	5.00		98.6	70-130			
p,m-Xylene	10.0	0.0500	10.0		100	70-130			
Total Xylenes	14.9	0.0250	15.0		99.6	70-130			
Surrogate: 4-Bromochlorobenzene-PID	8.00		8.00		100	70-130			

#### Matrix Spike (2441015-MS1)

Source: E410057-06

Prepared: 10/08/24 Analyzed: 10/10/24

Benzene	5.87	0.0250	5.00	ND	117	54-133			
Ethylbenzene	5.69	0.0250	5.00	ND	114	61-133			
Toluene	5.80	0.0250	5.00	ND	116	61-130			
o-Xylene	5.71	0.0250	5.00	ND	114	63-131			
p,m-Xylene	11.5	0.0500	10.0	ND	115	63-131			
Total Xylenes	17.3	0.0250	15.0	ND	115	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			

#### Matrix Spike Dup (2441015-MSD1)

Source: E410057-06

Prepared: 10/08/24 Analyzed: 10/10/24

Benzene	5.38	0.0250	5.00	ND	108	54-133	8.65	20	
Ethylbenzene	5.24	0.0250	5.00	ND	105	61-133	8.15	20	
Toluene	5.33	0.0250	5.00	ND	107	61-130	8.44	20	
o-Xylene	5.26	0.0250	5.00	ND	105	63-131	8.15	20	
p,m-Xylene	10.7	0.0500	10.0	ND	107	63-131	7.96	20	
Total Xylenes	15.9	0.0250	15.0	ND	106	63-131	8.02	20	
Surrogate: 4-Bromochlorobenzene-PID	8.01		8.00		100	70-130			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Volatile Organics by EPA 8021B

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441016-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Benzene	ND	0.0250							
Ethylbenzene	ND	0.0250							
Toluene	ND	0.0250							
o-Xylene	ND	0.0250							
p,m-Xylene	ND	0.0500							
Total Xylenes	ND	0.0250							
Surrogate: 4-Bromochlorobenzene-PID	7.83		8.00		97.9	70-130			

**LCS (2441016-BS1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Benzene	4.41	0.0250	5.00		88.3	70-130			
Ethylbenzene	4.50	0.0250	5.00		90.0	70-130			
Toluene	4.52	0.0250	5.00		90.4	70-130			
o-Xylene	4.52	0.0250	5.00		90.3	70-130			
p,m-Xylene	9.18	0.0500	10.0		91.8	70-130			
Total Xylenes	13.7	0.0250	15.0		91.3	70-130			
Surrogate: 4-Bromochlorobenzene-PID	7.84		8.00		98.0	70-130			

**Matrix Spike (2441016-MS1)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/10/24

Benzene	4.31	0.0250	5.00	ND	86.1	54-133			
Ethylbenzene	4.75	0.0250	5.00	ND	95.1	61-133			
Toluene	4.67	0.0250	5.00	ND	93.4	61-130			
o-Xylene	4.81	0.0250	5.00	ND	96.2	63-131			
p,m-Xylene	9.68	0.0500	10.0	ND	96.8	63-131			
Total Xylenes	14.5	0.0250	15.0	ND	96.6	63-131			
Surrogate: 4-Bromochlorobenzene-PID	8.21		8.00		103	70-130			

**Matrix Spike Dup (2441016-MSD1)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/08/24

Benzene	4.82	0.0250	5.00	ND	96.5	54-133	11.3	20	
Ethylbenzene	4.93	0.0250	5.00	ND	98.5	61-133	3.52	20	
Toluene	4.94	0.0250	5.00	ND	98.8	61-130	5.62	20	
o-Xylene	4.95	0.0250	5.00	ND	98.9	63-131	2.80	20	
p,m-Xylene	10.0	0.0500	10.0	ND	100	63-131	3.49	20	
Total Xylenes	15.0	0.0250	15.0	ND	99.8	63-131	3.26	20	
Surrogate: 4-Bromochlorobenzene-PID	7.82		8.00		97.8	70-130			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441015-BLK1)**

Prepared: 10/08/24 Analyzed: 10/10/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.58		8.00		94.8	70-130			

**LCS (2441015-BS2)**

Prepared: 10/08/24 Analyzed: 10/10/24

Gasoline Range Organics (C6-C10)	45.7	20.0	50.0		91.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.70		8.00		96.3	70-130			

**Matrix Spike (2441015-MS2)**

Source: E410057-06

Prepared: 10/08/24 Analyzed: 10/10/24

Gasoline Range Organics (C6-C10)	46.3	20.0	50.0	ND	92.6	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.74		8.00		96.7	70-130			

**Matrix Spike Dup (2441015-MSD2)**

Source: E410057-06

Prepared: 10/08/24 Analyzed: 10/10/24

Gasoline Range Organics (C6-C10)	44.0	20.0	50.0	ND	87.9	70-130	5.20	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.76		8.00		97.0	70-130			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Nonhalogenated Organics by EPA 8015D - GRO

Analyst: CG

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec % %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441016-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Gasoline Range Organics (C6-C10)	ND	20.0							
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.57		8.00		94.7	70-130			

**LCS (2441016-BS2)**

Prepared: 10/08/24 Analyzed: 10/08/24

Gasoline Range Organics (C6-C10)	42.0	20.0	50.0		84.1	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.82		8.00		97.8	70-130			

**Matrix Spike (2441016-MS2)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/08/24

Gasoline Range Organics (C6-C10)	43.7	20.0	50.0	ND	87.4	70-130			
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.77		8.00		97.1	70-130			

**Matrix Spike Dup (2441016-MSD2)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/08/24

Gasoline Range Organics (C6-C10)	45.6	20.0	50.0	ND	91.3	70-130	4.29	20	
Surrogate: 1-Chloro-4-fluorobenzene-FID	7.88		8.00		98.5	70-130			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441020-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	54.6		50.0		109	50-200			

**LCS (2441020-BS1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	281	25.0	250		112	38-132			
Surrogate: n-Nonane	55.9		50.0		112	50-200			

**Matrix Spike (2441020-MS1)**

Source: E410057-07

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	321	25.0	250	63.1	103	38-132			
Surrogate: n-Nonane	56.1		50.0		112	50-200			

**Matrix Spike Dup (2441020-MSD1)**

Source: E410057-07

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	351	25.0	250	63.1	115	38-132	8.79	20	
Surrogate: n-Nonane	56.1		50.0		112	50-200			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
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#### Nonhalogenated Organics by EPA 8015D - DRO/ORO

Analyst: NV

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441021-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	ND	25.0							
Oil Range Organics (C28-C36)	ND	50.0							
Surrogate: n-Nonane	50.7		50.0		101	50-200			

**LCS (2441021-BS1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	294	25.0	250		118	38-132			
Surrogate: n-Nonane	55.4		50.0		111	50-200			

**Matrix Spike (2441021-MS1)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	291	25.0	250	ND	116	38-132			
Surrogate: n-Nonane	54.8		50.0		110	50-200			

**Matrix Spike Dup (2441021-MSD1)**

Source: E410057-24

Prepared: 10/08/24 Analyzed: 10/08/24

Diesel Range Organics (C10-C28)	315	25.0	250	ND	126	38-132	8.16	20	
Surrogate: n-Nonane	59.2		50.0		118	50-200			



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
--	---	--

#### Anions by EPA 300.0/9056A

Analyst: DT

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
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**Blank (2441018-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride ND 20.0

**LCS (2441018-BS1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride 258 20.0 250 103 90-110

**Matrix Spike (2441018-MS1)**

Source: E410057-04

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride 287 100 250 ND 115 80-120

**Matrix Spike Dup (2441018-MSD1)**

Source: E410057-04

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride 287 100 250 ND 115 80-120 0.188 20



### QC Summary Data

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/2024 7:56:53AM
--	---	--

#### Anions by EPA 300.0/9056A

Analyst: JM

Analyte	Result mg/kg	Reporting Limit mg/kg	Spike Level mg/kg	Source Result mg/kg	Rec %	Rec Limits %	RPD %	RPD Limit %	Notes
---------	-----------------	-----------------------------	-------------------------	---------------------------	----------	--------------------	----------	-------------------	-------

**Blank (2441028-BLK1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride	ND	20.0							
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**LCS (2441028-BS1)**

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride	253	20.0	250		101	90-110			
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**Matrix Spike (2441028-MS1)**

Source: E410057-27

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride	272	100	250	ND	109	80-120			
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**Matrix Spike Dup (2441028-MSD1)**

Source: E410057-27

Prepared: 10/08/24 Analyzed: 10/08/24

Chloride	278	100	250	ND	111	80-120	2.14	20	
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QC Summary Report Comment:

Calculations are based off of the raw (non-rounded) data. However, for reporting purposes all QC data is rounded to three significant figures. Therefore, hand calculated values may differ slightly.



### Definitions and Notes

Vertex Resource Services Inc. 3101 Boyd Drive Carlsbad NM, 88220	Project Name: River Bend 12-13 Fed 20H Project Number: 19031-0001 Project Manager: Chad Hensley	<b>Reported:</b> 10/14/24 07:56
--	---	------------------------------------

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

RPD Relative Percent Difference

DNI Did Not Ignite

DNR Did not react with the addition of acid or base.

Note (1): Methods marked with \*\* are non-accredited methods.

Note (2): Soil data is reported on an "as received" weight basis, unless reported otherwise.



Chain of Custody

Released to Imaging: 3/4/2026 3:49:44 PM

Received by OCD: 1/22/2026 11:31:20 AM

<b>Client Information</b>		<b>Invoice Information</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>State</b>							
Client: <u>Vertex Resource</u>		Company: <u>Vertex Resource</u>		Lab WO# <u>E410057</u>		Job Number <u>19031-0001</u>		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: <u>River Bend 12-13 Feb 2011</u>		Address: <u>3101 Boyd dr</u>		City, State, Zip: <u>Carlsbad, NM, 88520</u>		Phone: <u>575-361-9639</u>									
Project Manager: <u>Chad Hensley</u>		Email: <u>CHensley@vertexresource.com</u>		Miscellaneous:											
Address: <u>3101 Boyd dr</u>															
City, State, Zip: <u>Carlsbad, NM, 88520</u>															
Phone: <u>575-361-9639</u>															
Email: <u>CHensley@vertexresource.com</u>															
Email: <u>R.Ploger@vertexresource.com</u>															

Sample Information										Analysis and Method								EPA Program		
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA			
8:30	10-7-24	Soil	1	TT24-01 @ 1'		1	X	X	X	X										
8:36				01 @ 2'		2														
8:42				02 @ 1'		3														
8:49				02 @ 2'		4														
8:53				03 @ 1'		5														
8:55				03 @ 2'		6														
9:00				03 @ 4'		7														
9:07				03 @ 6'		8														
9:13				03 @ 8'		9														
9:25				04 @ 1'		10														

Additional Instructions:

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days. Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>
<u>R. M.</u>		10.7.24	1130	<u>Michelle Gonzales</u>		10-7-24	1130	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	
<u>Michelle Gonzales</u>		10-7-24	1720	<u>[Signature]</u>		10-7-24	1620	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	
<u>[Signature]</u>		10-7-24	2054	<u>Thuyhan R. Hiep</u>		10-8-24	0500	
Relinquished by: (Signature)		Date	Time	Received by: (Signature)		Date	Time	

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Chain of Custody

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Received by OCD: 1/22/2026 11:31:20 AM

<b>Client Information</b>		<b>Invoice Information</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>State</b>							
Client: <u>Vertex</u>		Company: _____		Lab WO# <u>E410057</u>		Job Number <u>19031-0001</u>		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: <u>Riverbend 12-13 Feb 20th</u>		Address: _____													
Project Manager: _____		City, State, Zip: _____													
Address: _____		Phone: _____													
City, State, Zip: _____		Email: _____													
Phone: _____		Miscellaneous: _____													
Email: _____															

Sample Information										Analysis and Method								EPA Program			Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA				
Compliance															Y	or	N				
PWSID #																					
9:33	10.12.24	soil	1	TT24-04 @ 2'		11	X	X	X		X										
9:45				05 @ 1'		12															
9:51				05 @ 2'		13															
9:58				05 @ 4'		14															
10:04				05 @ 6'		15															
10:15				05 @ 8'		16															
10:32				06 @ 1'		17															
10:37				06 @ 2'		18															
10:45				06 @ 4'		19															
10:54				06 @ 6'		20															

**Additional Instructions:**

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Sampled by: _____										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days. <b>Lab Use Only</b> Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>					
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10.7.24</u>	Time <u>1130</u>	Received by: (Signature) <u>Michelle Gonzalez</u>	Date <u>10-7-24</u>	Time <u>1130</u>										
Relinquished by: (Signature) <u>Michelle Gonzalez</u>	Date <u>10-7-24</u>	Time <u>1720</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>1626</u>										
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>2054</u>	Received by: (Signature) <u>Angela K Heck</u>	Date <u>10-8-24</u>	Time <u>0500</u>										

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

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<b>Client Information</b>				<b>Invoice Information</b>				<b>Lab Use Only</b>				<b>TAT</b>				<b>State</b>				
Client: <u>Vertex</u>				Company: _____				Lab WO# <u>E410057</u>		Job Number <u>9031-0001</u>		1D	2D	3D	Std	NM	CO	UT	TX	
Project Name: <u>Riverbend 12-13-Feb 201</u>				Address: _____																
Project Manager: _____				City, State, Zip: _____																
Address: _____				Phone: _____																
City, State, Zip: _____				Email: _____																
Phone: _____				Miscellaneous: _____																
Email: _____																				

Sample Information										Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	PCRA 8 Metals	SDWA	CWA	RCRA	Compliance	PWSID #	Remarks	
11:04	10.16.24	soil	1	TT24-06 @ 0'		21	X	X	X		X							Y			
11:14	↓	↓	↓	TT24-07 @ 1'		22	↓	↓	↓		↓										
11:27	↓	↓	↓	07 @ 2'		23	↓	↓	↓		↓										
11:52	↓	↓	↓	08 @ 1'		24	↓	↓	↓		↓										
12:02	↓	↓	↓	08 @ 2'		25	↓	↓	↓		↓										
1:04	↓	↓	↓	09 @ 1'		26	↓	↓	↓		↓										
1:18	↓	↓	↓	09 @ 2'		27	↓	↓	↓		↓										

**Additional Instructions:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: _____										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days.									
Relinquished by: (Signature) <u>RMM</u>	Date <u>10.7.24</u>	Time <u>1130</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1130</u>					Lab Use Only									
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1720</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>1825</u>					Received on ice: <input checked="" type="checkbox"/> Y / N									
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>2054</u>	Received by: (Signature) <u>Kayla R. Hill</u>	Date <u>10-8-24</u>	Time <u>0500</u>					T1 _____ T2 _____ T3 _____									
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time					AVG Temp °C <u>4</u>									

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

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Chain of Custody

Released to Imaging: 3/4/2026 3:49:44 PM

Received by OCD: 1/22/2026 11:31:20 AM

<b>Client Information</b>		<b>Invoice Information</b>		<b>Lab Use Only</b>		<b>TAT</b>		<b>State</b>							
Client: <u>Vertex Resource</u>		Company: <u>Vertex Resource</u>		Lab WO# <u>E410057</u>		Job Number <u>19031-0001</u>		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: <u>River Bend 12-13 Feb 2011</u>		Address: <u>3101 Boyd dr</u>		City, State, Zip: <u>Carlsbad, NM, 88220</u>		Phone: <u>575-361-9639</u>									
Project Manager: <u>Chad Hensley</u>		Email: <u>CHensley@vertexresource.com</u>		Miscellaneous:											
Address: <u>3101 Boyd dr</u>															
City, State, Zip: <u>Carlsbad, NM, 88220</u>															
Phone: <u>575-361-9639</u>															
Email: <u>CHensley@vertexresource.com</u>															
Email: <u>R.Plogger@vertexresource.com</u>															

Sample Information										Analysis and Method								EPA Program			Remarks
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA				
Compliance															Y	or	N				
PWSID #																					
8:30	10-7-24	Soil	1	TT24-01 @ 1'		1	X	X	X		X										
8:36				01 @ 2'		2															
8:42				02 @ 1'		3															
8:49				02 @ 2'		4															
8:53				03 @ 1'		5															
8:55				03 @ 2'		6															
9:00				03 @ 4'		7															
9:07				03 @ 6'		8															
9:13				03 @ 8'		9															
9:25				04 @ 1'		10															

**Additional Instructions:**

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Sampled by: _____										Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days.							
Relinquished by: (Signature) <u>R. M.</u>	Date <u>10.7.24</u>	Time <u>1130</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1130</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>											
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1720</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>1626</u>												
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>2054</u>	Received by: (Signature) <u>Thuyhan R. Hiep</u>	Date <u>10-8-24</u>	Time <u>0500</u>												
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time												

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

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Chain of Custody

Released to Imaging: 3/4/2026 3:49:44 PM

Received by OCD: 1/22/2026 11:31:20 AM

Page 46 of 47

Client Information				Invoice Information				Lab Use Only				TAT				State			
Client: <u>Vertex</u>				Company: _____				Lab WO# <u>E410057</u>		Job Number <u>19031-0001</u>		1D	2D	3D	Std	NM	CO	UT	TX
Project Name: <u>Riverbend 12-13 Feb 20th</u>				Address: _____															
Project Manager: _____				City, State, Zip: _____															
Address: _____				Phone: _____															
City, State, Zip: _____				Email: _____															
Phone: _____				Miscellaneous: _____															
Email: _____																			

Sample Information										Analysis and Method								EPA Program						
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	RCRA 8 Metals	SDWA	CWA	RCRA	Compliance	Y	or	N	PWSID #	Remarks	
9:33	10.10.24	soil	1	TT24-04 @ 2'		11	X	X	X		X													
9:45				05 @ 1'		12																		
9:51				05 @ 2'		13																		
9:58				05 @ 4'		14																		
10:04				05 @ 6'		15																		
10:15				05 @ 8'		16																		
10:32				06 @ 1'		17																		
10:37				06 @ 2'		18																		
10:45				06 @ 4'		19																		
10:54				06 @ 6'		20																		

Additional Instructions:

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Sampled by: _____						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days.					
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time	Lab Use Only Received on ice: <input checked="" type="checkbox"/> Y / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>					
<u>[Signature]</u>	10.7.24	1130	<u>Michelle Gonzalez</u>	10.7.24	1130						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						
<u>Michelle Gonzalez</u>	10.7.24	1720	<u>[Signature]</u>	10.7.24	1526						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						
<u>[Signature]</u>	10.7.24	2054	<u>Angela K Heck</u>	10.8.24	0500						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.



Page 159 of 364

Chain of Custody

Released to Imaging: 3/4/2026 3:49:44 PM

Received by OCD: 1/22/2026 11:31:20 AM

Client Information				Invoice Information				Lab Use Only				TAT				State							
Client: <u>Vertex</u>				Company: _____				Lab WO# <u>E410057</u>				Job Number <u>9031-0001</u>				1D 2D 3D Std <input checked="" type="checkbox"/>				NM CO UT TX _____			
Project Name: <u>Riverbend 12-13-Feb 201</u>				Address: _____																			
Project Manager: _____				City, State, Zip: _____																			
Address: _____				Phone: _____																			
City, State, Zip: _____				Email: _____																			
Phone: _____				Miscellaneous: _____																			
Email: _____																							

Sample Information										Analysis and Method								EPA Program			
Time Sampled	Date Sampled	Matrix	No. of Containers	Sample ID	Field Filter	Lab Number	DRO/ORO by 8015	GRO/DRO by 8015	BTEX by 8021	VOC by 8260	Chloride 300.0	BGDOC - NM	TCEQ 1005 - TX	PCRA 8 Metals	SDWA	CWA	RCRA	Compliance	PWSID #	Remarks	
11:04	10.7.24	soil	1	TT24-06 @ 8'		21	X	X	X		X							Y			
11:14				TT24-07 @ 1'		22															
11:27				07 @ 2'		23															
11:52				08 @ 1'		24															
12:02				08 @ 2'		25															
1:04				09 @ 1'		26															
1:18				09 @ 2'		27															

**Additional Instructions:**

I, (field sampler), attest to the validity and authenticity of this sample. I am aware that tampering with or intentionally mislabeling the sample location, date or time of collection is considered fraud and may be grounds for legal action.

Sampled by: _____						Samples requiring thermal preservation must be received on ice the day they are sampled or received packed in ice at an avg temp above 0 but less than 6C on subsequent days.					
Relinquished by: (Signature) <u>RMM</u>	Date <u>10.7.24</u>	Time <u>1130</u>	Received by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1130</u>	Lab Use Only Received on ice: <input checked="" type="checkbox"/> / N T1 _____ T2 _____ T3 _____ AVG Temp °C <u>4</u>					
Relinquished by: (Signature) <u>Michelle Gonzales</u>	Date <u>10-7-24</u>	Time <u>1720</u>	Received by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>1825</u>						
Relinquished by: (Signature) <u>[Signature]</u>	Date <u>10-7-24</u>	Time <u>2054</u>	Received by: (Signature) <u>Kunyah R. Hill</u>	Date <u>10-8-24</u>	Time <u>0500</u>						
Relinquished by: (Signature)	Date	Time	Received by: (Signature)	Date	Time						

Sample Matrix: S - Soil, Sd - Solid, Sg - Sludge, A - Aqueous, O - Other \_\_\_\_\_ Container Type: g - glass, p - poly/plastic, ag - amber glass, v - VOA \_\_\_\_\_

Note: Samples are discarded 14 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at the client expense. The report for the analysis of the above samples is applicable only to those samples received by the laboratory with this COC. The liability of the laboratory is limited to the amount paid for on the report.





PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

October 31, 2025

CHAD HENSLEY  
VERTEX RESOURCE  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

RE: RIVERBEND 12-13 FEDERAL COM 20H

Enclosed are the results of analyses for samples received by the laboratory on 10/27/25 13:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 02 @ 0-3' (H256765-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 77.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.1 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 04 @ 0-7' (H256765-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 75.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.1 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 05 @ 0-7' (H256765-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 80.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 70.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 06 @ 0-7' (H256765-04)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 78.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 07 @ 0-7' (H256765-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 62.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 56.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 10/27/2025  
 Reported: 10/31/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 10/24/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS 25 - 08 @ 0-7' (H256765-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 66.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 61.1 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 10/27/2025  
 Reported: 10/31/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 10/24/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS 25 - 09 @ 0-7' (H256765-07)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 75.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.8 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 10 @ 0-7' (H256765-08)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 74.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 63.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 11 @ 0-7' (H256765-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 79.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 70.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 12 @ 0-7' (H256765-10)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 74.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 13 @ 0-4' (H256765-11)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 81.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 14 @ 0-4' (H256765-12)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.64	82.1	2.00	5.56	
Toluene*	<0.050	0.050	10/29/2025	ND	1.72	85.8	2.00	4.44	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.73	86.5	2.00	4.04	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.43	90.6	6.00	3.55	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 69.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 64.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 15 @ 0-4' (H256765-13)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 84.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 16 @ 0-4' (H256765-14)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	207	104	200	7.11	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	228	114	200	5.57	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 73.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 68.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS 25 - 17 @ 0-4' (H256765-15)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 73.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 01 @ 3' (H256765-16)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14		
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 68.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 64.9 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 10/27/2025  
 Reported: 10/31/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 10/24/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS 25 - 02 @ 3' (H256765-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14		
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 68.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 65.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 03 @ 3' (H256765-18)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 60.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 60.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 04 @ 3' (H256765-19)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 78.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 74.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 05 @ 3' (H256765-20)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 69.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 65.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 06 @ 3' (H256765-21)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 85.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.4 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 07 @ 3' (H256765-22)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 77.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 75.2 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 08 @ 3' (H256765-23)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14		
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 73.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 69.4 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 09 @ 3' (H256765-24)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 78.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 74.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 10 @ 3' (H256765-25)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 73.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 70.4 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 11 @ 3' (H256765-26)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14		
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	10/29/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 62.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 59.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 12 @ 7' (H256765-27)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 59.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 54.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 13 @ 7' (H256765-28)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 66.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 62.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 14 @ 7' (H256765-29)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14		
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 62.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 60.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 15 @ 7' (H256765-30)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 54.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 50.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 16 @ 7' (H256765-31)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 57.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 54.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 17 @ 7' (H256765-32)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.88	93.8	2.00	3.14	
Toluene*	<0.050	0.050	10/29/2025	ND	1.94	97.0	2.00	2.37	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	2.03	101	2.00	3.03	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	6.33	105	6.00	3.48	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 71.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 68.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 18 @ 7' (H256765-33)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	QM-07	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 65.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 62.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 19 @ 7' (H256765-34)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	198	98.9	200	3.95		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	210	105	200	3.21		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 78.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 10/27/2025  
 Reported: 10/31/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 10/24/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS 25 - 20 @ 7' (H256765-35)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 82.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 21 @ 7' (H256765-36)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 76.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 67.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 22 @ 7' (H256765-37)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	48.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 72.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 65.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 23 @ 7' (H256765-38)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 75.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 70.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 24 @ 7' (H256765-39)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 79.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 25 @ 7' (H256765-40)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>48.0</b>	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 87.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 82.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 26 @ 7' (H256765-41)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 77.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 70.5 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 27 @ 7' (H256765-42)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 76.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 71.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 28 @ 7' (H256765-43)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 103 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 98.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 90.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 29 @ 7' (H256765-44)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 87.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 30 @ 7' (H256765-45)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 102 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 79.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 31 @ 7' (H256765-46)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 77.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 71.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 32 @ 4' (H256765-47)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 93.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 10/27/2025  
 Reported: 10/31/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 10/24/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS 25 - 33 @ 4' (H256765-48)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38		
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64		
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76		
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26		
Total BTEX	<0.300	0.300	10/29/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	10/29/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30		
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49		
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND						

Surrogate: 1-Chlorooctane 88.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 82.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 34 @ 4' (H256765-49)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>64.0</b>	16.0	10/29/2025	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 92.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 83.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	10/27/2025	Sampling Date:	10/24/2025
Reported:	10/31/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS 25 - 35 @ 4' (H256765-50)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	10/29/2025	ND	1.87	93.3	2.00	8.38	
Toluene*	<0.050	0.050	10/29/2025	ND	1.90	95.0	2.00	7.64	
Ethylbenzene*	<0.050	0.050	10/29/2025	ND	1.91	95.4	2.00	6.76	
Total Xylenes*	<0.150	0.150	10/29/2025	ND	5.74	95.7	6.00	6.26	
Total BTEX	<0.300	0.300	10/29/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	10/29/2025	ND	416	104	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	10/29/2025	ND	225	113	200	2.30	
DRO >C10-C28*	<10.0	10.0	10/29/2025	ND	212	106	200	1.49	
EXT DRO >C28-C36	<10.0	10.0	10/29/2025	ND					

Surrogate: 1-Chlorooctane 91.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.2 % 39.9-141

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Notes and Definitions

- QM-07 The spike recovery was outside acceptance limits for the MS and/or MSD. The batch was accepted based on acceptable LCS recovery.
ND Analyte NOT DETECTED at or above the reporting limit
RPD Relative Percent Difference
\*\* Samples not received at proper temperature of 6°C or below.
\*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra	<b>BILL TO</b>	<b>ANALYSIS REQUEST</b>									
Project Manager: Chad Hensley	P.O. #:	<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTE X</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH (DRO/GRO/ONO)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride 4500</div> </div>									
Address: 3101 Boyd Drive	Company: Coterra										
City: Carlsbad State: NM Zip: 88220	Attn: Nathan Rose										
Phone #: Fax #:	Address: 7101 Norris Rd										
Project #: 24E-04393 Project Owner: Nathan Rose	City: Carlsbad										
Project Name: Riverbend 12-13 Fed Com 20H	State: Zip: 88220										
Project Location: Eddy County	NM										
Sampler Name: Gilberto Sanchez	Phone #:										
	Fax #:										

Lab I.D.	Sample I.D.	GRAB OR (C)OMP	# CONTAINERS	MATRIX							PRESERV.		SAMPLING		DATE	TIME	BTE X	TPH (DRO/GRO/ONO)	Chloride 4500
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER							
H256765																			
1	WS25-02 @ 0-3'		1		X						X			10/24	9:00	X	X	X	
2	WS25-04 @ 0-7'		1		X						X			10/24	9:05	X	X	X	
3	WS25-05 @ 0-7'		1		X						X			10/24	9:10	X	X	X	
4	WS25-06 @ 0-7'		1		X						X			10/24	9:15	X	X	X	
5	WS25-07 @ 0-7'		1		X						X			10/24	9:20	X	X	X	
6	WS25-08 @ 0-7'		1		X						X			10/24	9:25	X	X	X	
7	WS25-09 @ 0-7'		1		X						X			10/24	9:30	X	X	X	
8	WS25-10 @ 0-7'		1		X						X			10/24	9:35	X	X	X	
9	WS25-11 @ 0-7'		1		X						X			10/24	9:40	X	X	X	
10	WS25-12 @ 0-7'		1		X						X			10/24	9:45	X	X	X	

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Relinquished By: <i>Gilberto Sanchez</i>	Date: 10-27-25 Time: 1300	Received By: <i>Tamara Aldady</i>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #: 040240115- cell
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 0.6 Corrected Temp. °C: 0.9	Sample Condition Cool Intact: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Other: <input type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <i>VO</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush: <input type="checkbox"/>
			Thermometer ID: #140 Correction Factor: -0.5°C +0.3°C	Bacteria (only) Sample Condition: Cool Intact: <input type="checkbox"/> Observed Temp. °C: Yes <input type="checkbox"/> No <input type="checkbox"/>

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Chad Hensley		P.O. #:		BTEX TPH (D100 / G100 / O100) Chloride 4500									
Address: 3101 Boyd Drive		Company: Coterra											
City: Carlsbad		Attn: Nathan Rose											
State: <u>NM</u> Zip: <u>88220</u>		Address: 7101 Norris Rd											
Phone #:		City: Carlsbad											
Project #: <u>24E-04393</u>		State: Zip: <u>88220</u>											
Project Owner: <u>Nathan Rose</u>		NM											
Project Name: Riverbend 12-13 Fed Com 20H		Phone #:											
Project Location: Eddy County		Fax #:											
Sampler Name: Gilberto Sanchez													

Lab I.D.	Sample I.D.	GIRAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING	
				GROUNDWATER	WASTEWATER	SOIL	OIL	SILUDGE	OTHER ACID/BASE	ICE / COOL	OTHER	DATE
<u>H256765</u>												
<u>11</u>	<u>WS25-13 @ 0-4'</u>		<u>1</u>						<input checked="" type="checkbox"/>		<u>10/24</u>	<u>9:50</u>
<u>12</u>	<u>WS25-14 @ 0-4'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>9:55</u>
<u>13</u>	<u>WS25-15 @ 0-4'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>10:00</u>
<u>14</u>	<u>WS25-16 @ 0-4'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>10:05</u>
<u>15</u>	<u>WS25-17 @ 0-4'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>10:10</u>
<u>16</u>	<u>BS25-01 @ 3'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>11:00</u>
<u>17</u>	<u>BS25-02 @ 3'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>11:05</u>
<u>18</u>	<u>BS25-03 @ 3'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>11:10</u>
<u>19</u>	<u>BS25-04 @ 3'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>11:15</u>
<u>20</u>	<u>BS25-05 @ 3'</u>		<u>1</u>						<input checked="" type="checkbox"/>			<u>11:20</u>

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Relinquished By: <u> Gilberto Sanchez </u>	Date: <u> 10-27-25 </u>	Received By: <u> Tamara Olden </u>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
	Time: <u> 1300 </u>		All Results are emailed. Please provide Email address:	
Relinquished By:	Date:	Received By:	REMARKS:	
	Time:			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <u> TO </u>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition
	<u> 0.6 </u> <u> 0.9 </u>			RUSH <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C
				Thermometer ID <u> #140 </u>
				Correction Factor <u> -0.5°C </u>
				<input type="checkbox"/> Yes <input type="checkbox"/> No
				<input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3 of 5

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																	
Project Manager: Chad Hensley				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH (DRO/GRO/OKO)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">chloride 4500</div> </div>																	
Address: 3101 Boyd Drive				Company: Coterra																					
City: Carlsbad		State: <u>NM</u> Zip: <u>36220</u>		Attn: Nathan Rose																					
Phone #:		Fax #:		Address: 7101 Norris Rd																					
Project #: <u>246-04393</u>		Project Owner: <u>Nathan Rose</u>		City: Carlsbad																					
Project Name: Riverbend 12-13 Fed Com 20H				State: Zip: 88220																					
Project Location: Eddy County				NM																					
Sampler Name: Gilberto Sanchez				Phone #:																					
				Fax #:																					
FOR LAB USE ONLY																									
Lab I.D.		Sample I.D.		GRAB OR (C)OMP		# CONTAINERS		MATRIX				PRESERV.		SAMPLING											
				GROUNDWATER		WASTEWATER		SOIL		OIL		SLUDGE		OTHER		ACID/BASE		ICE / COOL		OTHER		DATE		TIME	
<u>H256765</u>																									
<u>21</u>		<u>BS25-06 @ 3'</u>																							
<u>22</u>		<u>BS25-07 @ 3'</u>																							
<u>23</u>		<u>BS25-08 @ 3'</u>																							
<u>24</u>		<u>BS25-09 @ 3'</u>																							
<u>25</u>		<u>BS25-10 @ 3'</u>																							
<u>26</u>		<u>BS25-11 @ 3'</u>																							
<u>27</u>		<u>BS25-12 @ 7'</u>																							
<u>28</u>		<u>BS25-13 @ 7'</u>																							
<u>29</u>		<u>BS25-14 @ 7'</u>																							
<u>30</u>		<u>BS25-15 @ 7'</u>																							

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Relinquished By: <u>Gilberto Sanchez</u>		Date: <u>10-27-25</u>	Received By: <u>Amara Aldrete</u>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Add'l Phone #:	
		Time: <u>1300</u>		All Results are emailed. Please provide Email address:			
Relinquished By:		Date:	Received By:	REMARKS:			
		Time:					
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <u>GO</u>	Turnaround Time: Standard <input checked="" type="checkbox"/> Rush <input type="checkbox"/>		Bacteria (only) Sample Condition
		<u>0.6</u> <u>0.9</u>			Thermometer ID # <u>140</u>	Observed Temp. °C	
					Correction Factor <u>-0.3C</u>	Corrected Temp. °C	
					<input type="checkbox"/> Yes <input type="checkbox"/> No		
					<input type="checkbox"/> Yes <input type="checkbox"/> No		

0402401K - all

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

4 of 5

Page 56 of 57

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: Chad Hensley		P.O. #:		<div style="display: flex; justify-content: space-between;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEX</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPH(DRO/GRO/ORO)</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride 4500</div> </div>											
Address: 3101 Boyd Drive		Company: Coterra													
City: Carlsbad State: NM Zip: 88220		Attn: Nathan Rose													
Phone #: Fax #:		Address: 7101 Norris Rd													
Project #: 24E-09393 Project Owner: Nathan Rose		City: Carlsbad													
Project Name: Riverbend 12-13 Fed Com 20H		State: Zip: 88220													
Project Location: Eddy County		NM													
Sampler Name: Gilberto Sanchez		Phone #:													
		Fax #:													

Lab I.D.	Sample I.D.	GRAB OR (C)OMP.	# CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME	BTEX	TPH(DRO/GRO/ORO)	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER: ACID/BASE	ICE / COOL	OTHER:						
H256765																	
31	BS25-16 @ 7'		1			X			X			10/24	12:20	X	X	X	
32	BS25-17 @ 7'		1			X			X				12:25	X	X	X	
33	BS25-18 @ 7'		1			X			X				12:30	X	X	X	
34	BS25-19 @ 7'		1			X			X				12:35	X	X	X	
35	BS25-20 @ 7'		1			X			X				12:40	X	X	X	
36	BS25-21 @ 7'		1			X			X				12:45	X	X	X	
37	BS25-22 @ 7'		1			X			X				12:50	X	X	X	
38	BS25-23 @ 7'		1			X			X				12:55	X	X	X	
39	BS25-24 @ 7'		1			X			X				12:56	X	X	X	
40	BS25-25 @ 7'		1			X			X				1:06	X	X	X	

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Relinquished By: <i>[Signature]</i>	Date: 10-27-25 Time: 1300	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C 0.6 0.9	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <i>[Signature]</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition
				Rush <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C
				Thermometer ID: #140 Correction Factor: -0.3°C +0.3°C
				<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

0402401K - all

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### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Chad Hensley		P.O. #:											
Address: 3101 Boyd Drive		Company: Coterra											
City: Carlsbad State: NM Zip: 88220		Attn: Nathan Rose											
Phone #: Fax #:		Address: 7101 Norris Rd											
Project #: 24E-04393 Project Owner: Nathan Rose		City: Carlsbad											
Project Name: Riverbend 12-13 Fed Com 20H		State: Zip: 88220											
Project Location: Eddy County		NM											
Sampler Name: Gilberto Sanchez		Phone #:											
		Fax #:											

Lab I.D.	Sample I.D.	(GRAB OR (C)OMP)	# CONTAINERS	MATRIX							PRESERV.		SAMPLING		DATE	TIME	BTEX	TPH (D10/G10/O10)	Chloride 4500
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER							
H252765																			
41	BS25-26 @ 7'		1											10/24	1:11	X	X	X	
42	BS25-27 @ 7'		1												1:18	X	X	X	
43	BS25-28 @ 7'		1												1:25	X	X	X	
44	BS25-29 @ 7'		1												1:30	X	X	X	
45	BS25-30 @ 7'		1												1:35	X	X	X	
46	BS25-31 @ 7'		1												1:40	X	X	X	
47	BS25-32 @ 4'		1												1:44	X	X	X	
48	BS25-33 @ 4'		1												1:48	X	X	X	
49	BS25-34 @ 4'		1												1:53	X	X	X	
50	BS25-35 @ 4'		1												1:59	X	X	X	

PLEASE NOTE: Liability and Damages: Cardinal's liability and client's exclusive remedy for any claim arising whether based in contract or tort, shall be limited to the amount paid by the client for the analysis. All claims, including those for negligence and any other cause whatsoever, shall be deemed waived unless made in writing and received by Cardinal within 30 days after completion of the applicable service. In no event shall Cardinal be liable for incidental or consequential damages, including without limitation, business interruptions, loss of use, or loss of profits incurred by client, its subsidiaries, affiliates or successors arising out of or related to the performance of services hereunder by Cardinal, regardless of whether such claim is based upon any of the above stated reasons or otherwise.

0402401K-all

Relinquished By: <i>Gilberto Sanchez</i>	Date: 10-27-25 Time: 1:30	Received By: <i>Jamara</i>	Verbal Result: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C 0.6 0.9	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>JS</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition
			Thermometer ID: #113 Correction Factor: -0.3°C	Observed Temp. °C: #140 +0.3°C

FORM-006 R 3.2 10/07/21

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

November 07, 2025

CHAD HENSLEY  
VERTEX RESOURCE  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

RE: RIVERBEND 12-13 FEDERAL COM 20H

Enclosed are the results of analyses for samples received by the laboratory on 11/03/25 12:34.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 01 @ 0-3' (H256909-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	2.25	112	2.00	5.58	
Toluene*	<0.050	0.050	11/04/2025	ND	1.99	99.7	2.00	3.78	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.09	104	2.00	4.09	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.58	110	6.00	4.52	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/03/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/03/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/03/2025	ND					

Surrogate: 1-Chlorooctane 96.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.8 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 03 @ 0-3' (H256909-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	2.25	112	2.00	5.58	
Toluene*	<0.050	0.050	11/04/2025	ND	1.99	99.7	2.00	3.78	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.09	104	2.00	4.09	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.58	110	6.00	4.52	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/03/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/03/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/03/2025	ND					

Surrogate: 1-Chlorooctane 105 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 18 @ 0-4' (H256909-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	2.25	112	2.00	5.58	
Toluene*	<0.050	0.050	11/04/2025	ND	1.99	99.7	2.00	3.78	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.09	104	2.00	4.09	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.58	110	6.00	4.52	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 80.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 19 @ 0-4' (H256909-04)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	2.25	112	2.00	5.58	
Toluene*	<0.050	0.050	11/04/2025	ND	1.99	99.7	2.00	3.78	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.09	104	2.00	4.09	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.58	110	6.00	4.52	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 94.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 20 @ 0-6' (H256909-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	2.25	112	2.00	5.58	
Toluene*	<0.050	0.050	11/04/2025	ND	1.99	99.7	2.00	3.78	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.09	104	2.00	4.09	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.58	110	6.00	4.52	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 83.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 21 @ 0-6' (H256909-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 102 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 95.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 22 @ 0-6' (H256909-07)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 91.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.9 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 23 @ 0-6' (H256909-08)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 93.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 24 @ 0-6' (H256909-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	186	93.0	200	1.53	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	199	99.5	200	1.95	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 99.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.6 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 25 @ 0-6' (H256909-10)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 80.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 36 @ 4' (H256909-11)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 91.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 37 @ 4' (H256909-12)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/04/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 93.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 38 @ 6' (H256909-13)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/04/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 85.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 39 @ 6' (H256909-14)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 94.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 40 @ 6' (H256909-15)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 95.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 41 @ 6' (H256909-16)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351	
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17	
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53	
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27	
Total BTEX	<0.300	0.300	11/04/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/04/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64	
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09	
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND					

Surrogate: 1-Chlorooctane 83.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 42 @ 6' (H256909-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/04/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 93.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.1 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 43 @ 6' (H256909-18)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 92.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 44 @ 6' (H256909-19)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 85.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 45 @ 6' (H256909-20)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 80.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 73.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 46 @ 6' (H256909-21)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 82.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 75.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 47 @ 6' (H256909-22)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 79.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 72.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 48 @ 6' (H256909-23)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 83.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/03/2025	Sampling Date:	10/31/2025
Reported:	11/07/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 49 @ 6' (H256909-24)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/04/2025	ND	1.96	98.0	2.00	0.351		
Toluene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	7.17		
Ethylbenzene*	<0.050	0.050	11/04/2025	ND	2.14	107	2.00	8.53		
Total Xylenes*	<0.150	0.150	11/04/2025	ND	6.46	108	6.00	8.27		
Total BTEX	<0.300	0.300	11/04/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/04/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/04/2025	ND	189	94.5	200	1.64		
DRO >C10-C28*	<10.0	10.0	11/04/2025	ND	190	95.2	200	1.09		
EXT DRO >C28-C36	<10.0	10.0	11/04/2025	ND						

Surrogate: 1-Chlorooctane 92.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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*Celey D. Keene*

Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>	
Project Manager: Chad Hensley		P.O. #:			
Address: 3101 Boyd Drive		Company: Coterra			
City: Carlsbad		Attn: Nathan Rose			
State: NM Zip: 88220		Address: 7101 Norris Rd			
Phone #: Fax #:		City: Carlsbad			
Project #: 24E-09393		State: Zip: 88220			
Project Owner: Nathan Rose		NM			
Project Name: Riverbend 12-13 Fed Com 20H		Phone #:			
Project Location: Eddy County		Fax #:			
Sampler Name: Gilberto Sanchez					

Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX					PRESERV.	SAMPLING	DATE	TIME	BTEX	TPH (DRO/GAS/OIL)	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE							
H256909															
1	WS25-01 @ 0-3'		1		X						10/31	0900	X	X	X
2	WS25-03 @ 0-3'		1		X							0905			
3	WS25-18 @ 0-4'		1		X							0910			
4	WS25-19 @ 0-4'		1		X							0915			
5	WS25-20 @ 0-6'		1		X							0920			
6	WS25-21 @ 0-6'		1		X							0925			
7	WS25-22 @ 0-6'		1		X							0930			
8	WS25-23 @ 0-6'		1		X							0935			
9	WS25-24 @ 0-6'		1		X							0940			
10	WS25-25 @ 0-6'		1		X							0945			

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Relinquished By: <i>[Signature]</i>	Date: 11/3/25 Time: 12:34	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C 0.4 0.7	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>[Signature]</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition: Rush: <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C
			Thermometer ID: #140 Correction Factor: -0.5 +0.3	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

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### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>											
Project Manager: Chad Hensley <i>CC: G Sanchez @ vertex resource.com</i>				P.O. #:				<i>BTEX</i> <i>TPH (Dro/Gro/Oro)</i> <i>Chloride 4500</i>											
Address: 3101 Boyd Drive				Company: Coterra															
City: Carlsbad		State: <i>NM</i> Zip: <i>88220</i>		Attn: Nathan Rose															
Phone #:		Fax #:		Address: 7101 Norris Rd															
Project #: <i>242-04393</i>		Project Owner: <i>Nathan Rose</i>		City: Carlsbad															
Project Name: Riverbend 12-13 Fed Com 20H				State: Zip: 88220															
Project Location: Eddy County				NM															
Sampler Name: Gilberto Sanchez				Phone #:															
				Fax #:															
FOR LAB USE ONLY																			
Lab I.D.		Sample I.D.		(GIRAB OR C/COMP)		# CONTAINERS		MATRIX			PRESERV.		SAMPLING						
								GROUNDWATER			ACID/BASE		DATE		TIME				
								WASTEWATER			ICE / COOL								
								SOIL			OTHER								
								OIL											
								SLUDGE											
								OTHER											
<i>H251909</i>																			
<i>11</i>		<i>B525-36 @ 4'</i>		<i>1</i>		<i>1</i>					<i>X</i>		<i>10/31</i>		<i>1000</i>				
<i>12</i>		<i>B525-37 @ 4'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1010</i>				
<i>13</i>		<i>B525-38 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1020</i>				
<i>14</i>		<i>B525-39 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1030</i>				
<i>15</i>		<i>B525-40 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1040</i>				
<i>16</i>		<i>B525-41 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1050</i>				
<i>17</i>		<i>B525-42 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1100</i>				
<i>18</i>		<i>B525-43 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1105</i>				
<i>19</i>		<i>B525-44 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1110</i>				
<i>20</i>		<i>B525-45 @ 6'</i>		<i>1</i>		<i>1</i>					<i>X</i>				<i>1120</i>				

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Relinquished By: <i>G Sanchez</i>		Date: <i>11-3-25</i>	Received By: <i>AS</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Time: <i>1234</i>		Time: <i>AS</i>		All Results are emailed. Please provide Email address:			
Relinquished By:		Date:	Received By:	REMARKS:			
Time:		Time:					
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C <i>04.6</i> Corrected Temp. °C <i>0.7</i>	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>AD</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition: <input checked="" type="checkbox"/> Rush <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C	Thermometer ID <i>#140</i> Correction Factor <i>-0.5°C</i>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

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101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

**CHAIN-OF-CUSTODY AND ANALYSIS REQUEST**

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>							
Project Manager: Chad Hensley Address: 3101 Boyd Drive City: Carlsbad State: NM Zip: 88220 Phone #: Fax #: Project #: 24E-04393 Project Owner: Nathan Rose Project Name: Riverbend 12-13 Fed Com 20H Project Location: Eddy County Sampler Name: Gilberto Sanchez				P.O. #: Company: Coterra Attn: Nathan Rose Address: 7101 Norris Rd City: Carlsbad State: Zip: 88220 NM Phone #: Fax #:				RTG X TPHC DRO / GRS / ORG Chloride 4500							
FOR LAB USE ONLY:				MATRIX								PRESERV.			
Lab I.D.				GROUNDWATER								DATE			
Sample I.D.				WASTEWATER								TIME			
				SOIL											
				OIL											
				SLUDGE											
				OTHER: ACID/BASE											
				ICE / COOL											
				OTHER:											
H255409															
21 BS25-46 @ 6'				1				10/31 1200							
22 BS25-47 @ 6'				1				1205							
23 BS25-48 @ 6'				1				1210							
24 BS25-49 @ 6'				1				1215							

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Relinquished By: <i>[Signature]</i>		Date: 11-3-25 Time: 1234	Received By: <i>[Signature]</i>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:		Date:	Received By:		All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C: 0.45 Corrected Temp. °C: 0.72	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) <i>[Signature]</i>	Turnaround Time: Standard <input checked="" type="checkbox"/> Bacteria (only) Sample Condition	
					Rush: <input type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C	
					Thermometer ID: #3 #143 Correction Factor: -0.5°C TO 3°C	<input type="checkbox"/> Yes <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

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PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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November 12, 2025

CHAD HENSLEY  
VERTEX RESOURCE  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

RE: RIVERBEND 12-13 FEDERAL COM 20H

Enclosed are the results of analyses for samples received by the laboratory on 11/10/25 12:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Celey D. Keene".

Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-26 @ 0-9' (H257055-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/11/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 107 % 52.4-130

Surrogate: 1-Chlorooctadecane 104 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-27 @ 0-9' (H257055-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2025	ND	432	108	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 98.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 95.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-28 @ 0-9' (H257055-03)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03		
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	432	108	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	216	108	200	0.208		
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	230	115	200	4.58		
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND						

Surrogate: 1-Chlorooctane 95.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.6 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-29 @ 0-9' (H257055-04)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03		
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	216	108	200	0.208		
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	230	115	200	4.58		
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND						

Surrogate: 1-Chlorooctane 82.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.7 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-30 @ 0-9' (H257055-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 116 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 92.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-31 @ 0-9' (H257055-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 87.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-32 @ 0-9' (H257055-07)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 111 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 82.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-33 @ 0-9' (H257055-08)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 96.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-34 @ 0-9' (H257055-09)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 95.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-35 @ 0-9' (H257055-10)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 94.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-36 @ 0-17' (H257055-11)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03		
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 101 % 52.4-130

Surrogate: 1-Chlorooctadecane 97.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-37 @ 0-17' (H257055-12)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 91.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-38 @ 0-17' (H257055-13)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 90.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.8 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-39 @ 0-17' (H257055-14)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 82.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 78.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-40 @ 0-17' (H257055-15)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 80.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 79.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/06/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-41 @ 0-17' (H257055-16)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 110 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 91.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-42 @ 0-17' (H257055-17)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03		
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 93.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/05/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-43 @ 0-4' (H257055-18)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	64.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 96.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/05/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-44 @ 0-4' (H257055-19)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 93.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.9 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-45 @ 0-14' (H257055-20)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.5	2.00	2.03	
Toluene*	<0.050	0.050	11/11/2025	ND	1.95	97.3	2.00	0.782	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	2.02	101	2.00	0.404	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	6.37	106	6.00	0.219	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	216	108	200	0.208	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	230	115	200	4.58	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 88.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.0 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-46 @ 0-14' (H257055-21)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 97.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 94.9 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-47 @ 0-14' (H257055-22)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/11/2025	ND	416	104	400	3.77		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND						

Surrogate: 1-Chlorooctane 90.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-48 @ 0-14' (H257055-23)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 86.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 82.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-49 @ 0-14' (H257055-24)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 68.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 63.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-50 @ 0-14' (H257055-25)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 90.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-51 @ 0-14' (H257055-26)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND						

Surrogate: 1-Chlorooctane 79.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 74.8 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-52 @ 0-14' (H257055-27)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND					

Surrogate: 1-Chlorooctane 103 % 52.4-130

Surrogate: 1-Chlorooctadecane 96.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-53 @ 0-14' (H257055-28)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/10/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/10/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/10/2025	ND						

Surrogate: 1-Chlorooctane 90.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 84.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-54 @ 0-14' (H257055-29)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 98.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 94.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-55 @ 0-14' (H257055-30)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 99.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-56 @ 0-14' (H257055-31)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 102 % 52.4-130

Surrogate: 1-Chlorooctadecane 97.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-57 @ 0-14' (H257055-32)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/10/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 96.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 90.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-58 @ 0-14' (H257055-33)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 113 % 52.4-130

Surrogate: 1-Chlorooctadecane 108 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-59 @ 0-14' (H257055-34)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/10/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/10/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/10/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/10/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/10/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 88.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-60 @ 0-14' (H257055-35)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>96.0</b>	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 97.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-61 @ 0-14' (H257055-36)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 97.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 98.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-62 @ 0-14' (H257055-37)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 88.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-63 @ 0-14' (H257055-38)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10		
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 86.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.9 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-64 @ 0-14' (H257055-39)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
<b>Chloride</b>	<b>96.0</b>	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 89.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 85.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-65 @ 0-10' (H257055-40)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.85	92.6	2.00	1.10	
Toluene*	<0.050	0.050	11/11/2025	ND	1.93	96.7	2.00	1.92	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	94.9	2.00	3.05	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.67	94.5	6.00	2.53	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	192	96.2	200	7.28	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	219	109	200	6.49	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 77.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 71.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-66 @ 0-10' (H257055-41)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81	
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	32.0	16.0	11/11/2025	ND	400	100	400	3.92	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 76.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 66.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-67 @ 0-10' (H257055-42)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	16.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 87.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 75.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-68 @ 0-10' (H257055-43)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/11/2025	ND	400	100	400	3.92		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.8 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-69 @ 0-10' (H257055-44)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 88.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-70 @ 0-10' (H257055-45)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 101 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25-71 @ 0-10' (H257055-46)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 104 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 93.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/05/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: WS25-72 @ 0-10' (H257055-47)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 105 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 93.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-50 @ 9' (H257055-48)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>768</b>	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 111 % 52.4-130

Surrogate: 1-Chlorooctadecane 99.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-51 @ 9' (H257055-49)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	48.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 106 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.6 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-52 @ 9' (H257055-50)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 103 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.0 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-53 @ 9' (H257055-51)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 106 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-54 @ 9' (H257055-52)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 97.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-55 @ 9' (H257055-53)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-56 @ 9' (H257055-54)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	32.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 99.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.8 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-57 @ 17' (H257055-55)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>96.0</b>	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 107 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/06/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-58 @ 17' (H257055-56)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 103 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.4 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-59 @ 4' (H257055-57)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 113 % 52.4-130

Surrogate: 1-Chlorooctadecane 97.2 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-60 @ 14' (H257055-58)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 107 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.0 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-61 @ 14' (H257055-59)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 106 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	128	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 107 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.9 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS25-62 @ 14' (H257055-60)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.93	96.5	2.00	2.81		
Toluene*	<0.050	0.050	11/11/2025	ND	1.96	97.8	2.00	1.64		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.90	95.1	2.00	2.98		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.68	94.7	6.00	2.93		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	2.12		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	220	110	200	2.72		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 106 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.4 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received: 11/10/2025  
 Reported: 11/12/2025  
 Project Name: RIVERBEND 12-13 FEDERAL COM 20H  
 Project Number: 24E - 04393  
 Project Location: COTERRA - EDDY CO NM

Sampling Date: 11/07/2025  
 Sampling Type: Soil  
 Sampling Condition: Cool & Intact  
 Sample Received By: Tamara Oldaker

**Sample ID: BS25-63 @ 14' (H257055-61)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	192	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 96.3 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-64 @ 14' (H257055-62)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 123 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	176	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 92.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 91.3 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-65 @ 14' (H257055-63)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 125 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: AC						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>144</b>	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-66 @ 14' (H257055-64)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	112	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.5 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-67 @ 14' (H257055-65)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 125 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-68 @ 14' (H257055-66)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50	
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	112	16.0	11/11/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 89.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-69 @ 14' (H257055-67)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 122 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	96.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 91.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 93.3 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-70 @ 14' (H257055-68)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50	
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 120 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	144	16.0	11/11/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 88.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 87.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-71 @ 14' (H257055-69)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 120 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	80.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 91.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 90.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-72 @ 14' (H257055-70)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 119 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 92.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.8 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/07/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-73 @ 14' (H257055-71)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 126 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 88.7 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.4 % 39.9-141

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\*=Accredited Analyte

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-74 @ 10' (H257055-72)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 81.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 79.1 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-75 @ 10' (H257055-73)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 91.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 90.6 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-76 @ 10' (H257055-74)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.0 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-77 @ 10' (H257055-75)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 117 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
<b>Chloride</b>	<b>144</b>	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 89.9 % 52.4-130

Surrogate: 1-Chlorooctadecane 89.2 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-78 @ 10' (H257055-76)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 95.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 94.1 % 39.9-141

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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-79 @ 10' (H257055-77)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	160	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 93.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 92.7 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-80 @ 10' (H257055-78)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50	
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57	
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10	
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11	
Total BTEX	<0.300	0.300	11/11/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/11/2025	ND	416	104	400	0.00	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88	
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85	
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND					

Surrogate: 1-Chlorooctane 90.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 86.9 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25-81 @ 10' (H257055-79)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 92.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 88.4 % 39.9-141

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Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/10/2025	Sampling Date:	11/05/2025
Reported:	11/12/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Tamara Oldaker
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BF TOP SOIL (H257055-80)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/11/2025	ND	1.68	84.2	2.00	1.50		
Toluene*	<0.050	0.050	11/11/2025	ND	1.82	90.8	2.00	1.57		
Ethylbenzene*	<0.050	0.050	11/11/2025	ND	1.84	92.2	2.00	2.10		
Total Xylenes*	<0.150	0.150	11/11/2025	ND	5.70	95.0	6.00	2.11		
Total BTEX	<0.300	0.300	11/11/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 115 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	<16.0	16.0	11/11/2025	ND	416	104	400	0.00		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/11/2025	ND	224	112	200	1.88		
DRO >C10-C28*	<10.0	10.0	11/11/2025	ND	214	107	200	1.85		
EXT DRO >C28-C36	<10.0	10.0	11/11/2025	ND						

Surrogate: 1-Chlorooctane 94.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 94.7 % 39.9-141

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\*=Accredited Analyte

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**Notes and Definitions**

- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Celey D. Keene, Lab Director/Quality Manager



CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>									
Project Manager: Chad Hensley CHensley@vertexresource.com		P.O. #:											
Address: 3101 Boyd Drive cc: GSanchez@vertexresource.com		Company: Coterra											
City: Carlsbad State: NM Zip: 88220		Attn: Nathan Rose											
Phone #: Fax #:		Address: 7101 Norris Rd											
Project #: 24E-64393 Project Owner: Nathan		City: Carlsbad											
Project Name: Riverbend 12-13 Fed Com 20H		State: Zip:											
Project Location: Eddy county		Phone #:											
Sampler Name: Gilberto Sanchez		Fax #:											

Lab I.D.	Sample I.D.	(GIRAB OR (C)OMP # CONTAINERS	MATRIX					PRESERV.		SAMPLING		DATE	TIME	STEX	TPHC DRO/area (area)	chloride 4500
			GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER ACID/BASE	ICE / COOL	OTHER						
H857055	1 WS25-26 @ 0-9'	1		X				X			11/6	9:00	X	X	X	
	2 WS25-27 @ 0-9'	1		X				X				9:10				
	3 WS25-28 @ 0-9'	1		X				X				9:20				
	4 WS25-29 @ 0-9'	1		X				X				9:30				
	5 WS25-30 @ 0-9'	1		X				X				10:00				
	6 WS25-31 @ 0-9'	1		X				X				10:10				
	7 WS25-32 @ 0-9'	1		X				X				10:20				
	8 WS25-33 @ 0-9'	1		X				X				10:25				
	9 WS25-34 @ 0-9'	1		X				X				10:35				
	10 WS25-35 @ 0-9'	1		X				X				10:45				

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Relinquished By: <i>[Signature]</i>	Date: 11-10-25 Time: 1200	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
REMARKS: NOT OUR Jars			All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 26 Corrected Temp. °C: 2.9	Sample Condition Cool <input checked="" type="checkbox"/> Intact <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: <i>[Signature]</i>	Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition
				Rush <input checked="" type="checkbox"/> Cool <input type="checkbox"/> Intact <input type="checkbox"/> Observed Temp. °C: 48 hrs Thermometer ID #113 Correction Factor -0.3°C #140 +0.3°C 11/10/25

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra		<b>BILL TO</b>		<b>ANALYSIS REQUEST</b>											
Project Manager: Chad Hensley CHensley@vertexresource.com		P.O. #:													
Address: 3101 Boyd Drive cc: GSanchez@vertexresource.com		Company: Coterra													
City: Carlsbad State: <i>NM</i> Zip: <i>88220</i>		Attn: Nathan Rose													
Phone #: Fax #:		Address: 7101 Norris Rd													
Project #: <i>24E-04393</i> Project Owner: Nathan		City: Carlsbad													
Project Name: Riverbend 12-13 Fed Com 20H		State: <i>NM</i> Zip: <i>88220</i>													
Project Location: Eddy county		Phone #:													
Sampler Name: Gilberto Sanchez		Fax #:													

Lab I.D.	Sample I.D.	(GIRAB OR (C)OMP)	# CONTAINERS	MATRIX							PRESERV.	SAMPLING		DATE	TIME	BTEX	TPH (DRO/GIRO/ORA)	Chloride
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE / COOL	OTHER						
<i>H257055</i>																		
<i>11</i>	<i>WS25-36 @ 0-17'</i>					<i>X</i>					<i>X</i>		<i>11/6</i>	<i>10:50</i>	<i>X</i>	<i>X</i>	<i>X</i>	
<i>12</i>	<i>WS25-37 @ 0-17'</i>												<i>11/6</i>	<i>11:00</i>				
<i>13</i>	<i>WS25-38 @ 0-17'</i>												<i>11/6</i>	<i>11:05</i>				
<i>14</i>	<i>WS25-39 @ 0-17'</i>												<i>11/6</i>	<i>11:10</i>				
<i>15</i>	<i>WS25-40 @ 0-17'</i>												<i>11/6</i>	<i>11:15</i>				
<i>16</i>	<i>WS25-41 @ 0-17'</i>												<i>11/6</i>	<i>11:20</i>				
<i>17</i>	<i>WS25-42 @ 0-17'</i>												<i>11/6</i>	<i>11:25</i>				
<i>18</i>	<i>WS25-43 @ 0-4'</i>												<i>11/5</i>	<i>9:00</i>				
<i>19</i>	<i>WS25-44 @ 0-4'</i>												<i>11/5</i>	<i>9:10</i>				
<i>20</i>	<i>WS25-45 @ 0-14'</i>												<i>11/7</i>	<i>9:00</i>				

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Relinquished By: <i>[Signature]</i>	Date: <i>11-10-25</i> Time: <i>1200</i>	Received By: <i>[Signature]</i>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: <i>2.6</i> Corrected Temp. °C: <i>2.9</i>	Sample Condition: Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Cool Intact <input type="checkbox"/> <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/>	CHECKED BY: (Initials) <i>[Initials]</i>	Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition: <input type="checkbox"/> Rush <input checked="" type="checkbox"/> Cool Intact Observed Temp. °C: Thermometer ID: <i>113</i> Correction Factor: <i>-0.3°C</i>
				REMARKS: <i>NOT OUR JARS</i>
				<i>48 hrs</i> <i>#140</i> <i>+0.3c</i> <i>11/10/25</i>

FORM-006 R 3.2 10/07/21

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(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

3098

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																							
Project Manager: Chad Hensley CHensley@vertexresource.com				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <p>BTEX</p> <p>TPH (Dro/Gro/Geo)</p> <p>chloride 4500</p> </div>																							
Address: 3101 Boyd Drive cc: GSanchez@vertexresource.com				Company: Coterra																											
City: Carlsbad State: NM Zip: 88220				Attn: Nathan Rose																											
Phone #: Fax #:				Address: 7101 Norris Rd																											
Project #: 246-04393 Project Owner: Nathan				City: Carlsbad																											
Project Name: Riverbend 12-13 Fed Com 20H				State: NM Zip: 88220																											
Project Location: Eddy county				Phone #:																											
Sampler Name: Gilberto Sanchez				Fax #:																											
FOR LAB USE ONLY																															
Lab I.D.	Sample I.D.	(GRAB OR (C)OMP	# CONTAINERS	MATRIX			PRESERV.													SAMPLING											
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER	DATE	TIME																	
H257055	WS25-46 @ 0-14'		1			X				X	✓		11/7	9:10	X	X	X														
22	WS25-47 @ 0-14'		1											9:20																	
23	WS25-48 @ 0-14'		1											9:25																	
24	WS25-49 @ 0-14'		1											9:30																	
25	WS25-50 @ 0-14'		1											9:35																	
26	WS25-51 @ 0-14'		1											9:40																	
27	WS25-52 @ 0-14'		1											9:45																	
28	WS25-53 @ 0-14'		1											9:50																	
29	WS25-54 @ 0-14'		1											9:55																	
30	WS25-55 @ 0-14'		1											9:57																	

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Relinquished By: <i>Robert Sanchez</i>		Date: 11-10-25 Time: 1200	Received By: <i>Juanana Aldrete</i>		Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No		Add'l Phone #:	
Relinquished By:		Date:	Received By:		REMARKS: NOT OUR JARS			
Delivered By: (Circle One) Sampler - UPS - Bus - Other:		Observed Temp. °C: 2.6 Corrected Temp. °C: 2.9	Sample Condition: Cool Intact <input checked="" type="checkbox"/> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/>		CHECKED BY: (Initials) <i>VO</i>		Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition	
					Rush <input checked="" type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C: 48 hrs Thermometer ID: #13 Correction Factor: -0.30 #140 VO 11/10/25		Yes <input type="checkbox"/> No <input type="checkbox"/>	

FORM-005 R 3.2 10/07/21

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CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

6 of 8

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																																																																																																																																																																				
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Relinquished By:	Date: 11-10-25 Time: 12:00	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:	
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C: 2.6 Corrected Temp. °C: 2.9	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) go.	Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition	REMARKS: Not our jars
				Rush <input checked="" type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C: #140 48 hrs Thermometer ID: M13 Correction Factor: -0.3°C #140 48 hrs +0.3°C	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com







PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

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November 26, 2025

CHAD HENSLEY  
VERTEX RESOURCE  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

RE: RIVERBEND 12-13 FEDERAL COM 20H

Enclosed are the results of analyses for samples received by the laboratory on 11/24/25 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder".

Mike Snyder For Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 73 @ 0-5.5' (H257371-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/25/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 82.3 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.2 % 39.9-141

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 74 @ 0-5.5' (H257371-02)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 114 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/25/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 83.0 % 52.4-130

Surrogate: 1-Chlorooctadecane 80.8 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 75 @ 0-5.5' (H257371-03)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: KH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	192	16.0	11/25/2025	ND	416	104	400	3.77	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 80.5 % 52.4-130

Surrogate: 1-Chlorooctadecane 77.9 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 76 @ 0-5.5' (H257371-04)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 112 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	256	16.0	11/25/2025	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 84.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.0 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: WS25 - 77 @ 0-5.5' (H257371-05)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 109 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	96.0	16.0	11/25/2025	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 79.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 75.2 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 82 @ 5.5' (H257371-06)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 107 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	160	16.0	11/25/2025	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 86.4 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.9 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 83 @ 5.5' (H257371-07)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139		
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90		
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14		
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33		
Total BTEX	<0.300	0.300	11/25/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	11/25/2025	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275		
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52		
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND						

Surrogate: 1-Chlorooctane 81.2 % 52.4-130

Surrogate: 1-Chlorooctadecane 76.5 % 39.9-141

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 84 @ 5.5' (H257371-08)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 113 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	208	16.0	11/25/2025	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 85.6 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.7 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 85 @ 5.5' (H257371-09)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139		
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90		
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14		
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33		
Total BTEX	<0.300	0.300	11/25/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 116 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	11/25/2025	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275		
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52		
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND						

Surrogate: 1-Chlorooctane 84.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.1 % 39.9-141

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/21/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 86 @ 5.5' (H257371-10)**

BTEX 8021B		mg/kg		Analyzed By: JH						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139		
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90		
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14		
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33		
Total BTEX	<0.300	0.300	11/25/2025	ND						

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500CI-B		mg/kg		Analyzed By: HM						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
Chloride	144	16.0	11/25/2025	ND	432	108	400	7.14		

TPH 8015M		mg/kg		Analyzed By: MS						
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier	
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275		
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52		
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND						

Surrogate: 1-Chlorooctane 86.1 % 52.4-130

Surrogate: 1-Chlorooctadecane 81.7 % 39.9-141

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



### CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>																																																																																																							
Project Manager: Chad Hensley CHensley@vertexresource.com				P.O. #:				<table border="1"> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> <tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr> </table>																																																																																																							
Address: 3101 Boyd Drive cc: GSanchez@vertexresource.com				Company: Coterra																																																																																																											
City: Carlsbad State: NM Zip: 88220				Attn: Nathan Rose																																																																																																											
Phone #: Fax #:				Address: 7101 Norris Rd																																																																																																											
Project #: 24E-04393 Project Owner: Nathan				City: Carlsbad																																																																																																											
Project Name: Riverbend 12-13 Fed Com 20H				State: NM Zip: 88220																																																																																																											
Project Location: Eddy county				Phone #:																																																																																																											
Sampler Name: Gilberto Sanchez				Fax #:																																																																																																											
FOR LAB USE ONLY																																																																																																															
Lab I.D.	Sample I.D.	(G)RAB OR (C)OMP	# CONTAINERS	MATRIX			PRESERV.	SAMPLING																																																																																																							
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE	ICE/COOL	OTHER																																																																																																			
H257371																																																																																																															
1	WS25-73 @ 0-5.5'		1							X																																																																																																					
2	WS25-74 @ 0-5.5'		1							X																																																																																																					
3	WS25-75 @ 0-5.5'		1							X																																																																																																					
4	WS25-76 @ 0-5.5'		1							X																																																																																																					
5	WS25-77 @ 0-5.5'		1							X																																																																																																					
6	BS25-82 @ 5.5'		1							X																																																																																																					
7	BS25-83 @ 5.5'		1							X																																																																																																					
8	BS25-84 @ 5.5'		1							X																																																																																																					
9	BS25-85 @ 5.5'		1							X																																																																																																					
10	BS25-86 @ 5.5'		1							X																																																																																																					

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Relinquished By:	Date: 11/24/25 Time: 11:00	Received By:	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:	
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:		
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C Corrected Temp. °C	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No	CHECKED BY: (Initials) AP	Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition	REMARKS: 
	4.50 4.80			Rush <input checked="" type="checkbox"/> Cool Intact <input type="checkbox"/> Observed Temp. °C	
				Thermometer ID #13 Correction Factor -0.5°C	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

FORM-006 R.3.2.10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

---

November 26, 2025

CHAD HENSLEY  
VERTEX RESOURCE  
3101 BOYD DRIVE  
CARLSBAD, NM 88220

RE: RIVERBEND 12-13 FEDERAL COM 20H

Enclosed are the results of analyses for samples received by the laboratory on 11/24/25 11:00.

Cardinal Laboratories is accredited through Texas NELAP under certificate number TX-C25-00101. Accreditation applies to drinking water, non-potable water and solid and chemical materials. All accredited analytes are denoted by an asterisk (\*). For a complete list of accredited analytes and matrices visit the TCEQ website at [www.tceq.texas.gov/field/qa/lab\\_accred\\_certif.html](http://www.tceq.texas.gov/field/qa/lab_accred_certif.html).

Cardinal Laboratories is accredited through the State of Colorado Department of Public Health and Environment for:

Method EPA 552.2	Haloacetic Acids (HAA-5)
Method EPA 524.2	Total Trihalomethanes (TTHM)
Method EPA 524.4	Regulated VOCs (V1, V2, V3)

Accreditation applies to public drinking water matrices.

This report meets NELAP requirements and is made up of a cover page, analytical results, and a copy of the original chain-of-custody. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in black ink that reads "Mike Snyder".

Mike Snyder For Celey D. Keene  
Lab Director/Quality Manager



PHONE (575) 393-2326 ° 101 E. MARLAND ° HOBBS, NM 88240

**Analytical Results For:**

VERTEX RESOURCE  
 CHAD HENSLEY  
 3101 BOYD DRIVE  
 CARLSBAD NM, 88220  
 Fax To: NA

Received:	11/24/2025	Sampling Date:	11/17/2025
Reported:	11/26/2025	Sampling Type:	Soil
Project Name:	RIVERBEND 12-13 FEDERAL COM 20H	Sampling Condition:	Cool & Intact
Project Number:	24E - 04393	Sample Received By:	Alyssa Parras
Project Location:	COTERRA - EDDY CO NM		

**Sample ID: BS25 - 50 @ 9.5' (H257378-01)**

BTEX 8021B		mg/kg		Analyzed By: JH					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Benzene*	<0.050	0.050	11/25/2025	ND	2.14	107	2.00	0.139	
Toluene*	<0.050	0.050	11/25/2025	ND	2.33	116	2.00	2.90	
Ethylbenzene*	<0.050	0.050	11/25/2025	ND	2.42	121	2.00	2.14	
Total Xylenes*	<0.150	0.150	11/25/2025	ND	7.50	125	6.00	2.33	
Total BTEX	<0.300	0.300	11/25/2025	ND					

Surrogate: 4-Bromofluorobenzene (PID) 108 % 70.4-141

Chloride, SM4500Cl-B		mg/kg		Analyzed By: HM					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
Chloride	128	16.0	11/25/2025	ND	432	108	400	7.14	

TPH 8015M		mg/kg		Analyzed By: MS					
Analyte	Result	Reporting Limit	Analyzed	Method Blank	BS	% Recovery	True Value QC	RPD	Qualifier
GRO C6-C10*	<10.0	10.0	11/25/2025	ND	202	101	200	0.275	
DRO >C10-C28*	<10.0	10.0	11/25/2025	ND	188	93.8	200	3.52	
EXT DRO >C28-C36	<10.0	10.0	11/25/2025	ND					

Surrogate: 1-Chlorooctane 80.8 % 52.4-130

Surrogate: 1-Chlorooctadecane 74.9 % 39.9-141

Cardinal Laboratories

\*=Accredited Analyte

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



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Notes and Definitions

- BS-3 Blank spike recovery outside of lab established statistical limits, but still within method limits. Data is not adversely affected.
- ND Analyte NOT DETECTED at or above the reporting limit
- RPD Relative Percent Difference
- \*\* Samples not received at proper temperature of 6°C or below.
- \*\*\* Insufficient time to reach temperature.
- Chloride by SM4500Cl-B does not require samples be received at or below 6°C  
Samples reported on an as received basis (wet) unless otherwise noted on report

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Mike Snyder For Celey D. Keene, Lab Director/Quality Manager



101 East Marland, Hobbs, NM 88240  
(575) 393-2326 FAX (575) 393-2476

CHAIN-OF-CUSTODY AND ANALYSIS REQUEST

1021

Company Name: Coterra				<b>BILL TO</b>				<b>ANALYSIS REQUEST</b>										
Project Manager: Chad Hensley CHensley@vertexresource.com				P.O. #:				<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">BTEx</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">TPHC DRO / GAO / ORO</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Chloride 4500</div> </div>										
Address: 3101 Boyd Drive cc: GSanchez@vertexresource.com				Company: Coterra														
City: Carlsbad State: <u>NM</u> Zip: <u>88220</u>				Attn: Nathan Rose														
Phone #: Fax #:				Address: 7101 Norris Rd														
Project #: <u>24E-04393</u> Project Owner: Nathan				City: Carlsbad														
Project Name: Riverbend 12-13 Fed Com 20H				State: <u>NM</u> Zip: <u>88220</u>														
Project Location: Eddy county				Phone #:														
Sampler Name: Gilberto Sanchez				Fax #:														
FOR LAB USE ONLY																		
Lab I.D.	Sample I.D.	(GRAB OR C/OMP)	# CONTAINERS	MATRIX			PRESERV.					SAMPLING						
				GROUNDWATER	WASTEWATER	SOIL	OIL	SLUDGE	OTHER	ACID/BASE:	ICE/COOL:	OTHER:	DATE	TIME				
<u>H257378</u>	<u>1 B825-50 @ 9.5'</u>		<u>1</u>		<u>X</u>						<u>X</u>		<u>11/17</u>	<u>11:00</u>	<u>X</u>	<u>X</u>	<u>X</u>	

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Relinquished By: <u>Gilberto Sanchez</u>	Date: <u>11-24-25</u> Time: <u>1100</u>	Received By: <u>ADANOS</u>	Verbal Result: <input type="checkbox"/> Yes <input type="checkbox"/> No	Add'l Phone #:
Relinquished By:	Date:	Received By:	All Results are emailed. Please provide Email address:	
Delivered By: (Circle One) Sampler - UPS - Bus - Other:	Observed Temp. °C <u>4.5</u> Corrected Temp. °C <u>4.8</u>	Sample Condition Cool Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	CHECKED BY: (Initials) <u>AD</u>	REMARKS: <u>04021101K</u>
			Turnaround Time: Standard <input type="checkbox"/> Bacteria (only) Sample Condition	
			Thermometer ID <u>113</u> Correction Factor <u>-0.6°C</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> No <input type="checkbox"/> No Corrected Temp. °C

FORM-006 R 3.2 10/07/21

† Cardinal cannot accept verbal changes. Please email changes to celey.keene@cardinallabsnm.com

## **APPENDIX D – Variance**

**From:** [Rodgers, Scott, EMNRD](#)  
**To:** [Chad Hensley](#)  
**Subject:** RE: [EXTERNAL] Variance for Sampling nAPP2425876097  
**Date:** Tuesday, January 13, 2026 9:41:00 AM

---

**Caution:** This email is from an external sender. Please take care when clicking links or opening attachments. When in doubt, contact your IT Department

Good morning,

The sampling notification variance request regarding 19.15.29.12D (1a) NMAC is approved.

Please keep a copy of this communication for inclusion within the appropriate reporting documentation.

If you have any questions, please contact me via email at your convenience.

Thank you,  
Scott

**Scott Rodgers** • Environmental Specialist – Adv.  
Environmental Bureau  
EMNRD - Oil Conservation Division  
5200 Oakland NE, Suite B | Albuquerque, NM 87113  
505.469.1830 | [scott.rodgers@emnrd.nm.gov](mailto:scott.rodgers@emnrd.nm.gov)  
<http://www.emnrd.nm.gov/oecd>



---

**From:** Chad Hensley <[CHensley@vertexresource.com](mailto:CHensley@vertexresource.com)>  
**Sent:** Monday, January 5, 2026 8:55 AM  
**To:** Rodgers, Scott, EMNRD <[Scott.Rodgers@emnrd.nm.gov](mailto:Scott.Rodgers@emnrd.nm.gov)>  
**Subject:** [EXTERNAL] Variance for Sampling nAPP2425876097

**CAUTION:** This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Scott,

Vertex on Behalf Coterra Energy request a sampling variance for the sampling date 10/24, 11/5 and 11/6 for incident number nAPP2425876097. Operator was out during this time, and no notice was sent to the state via the portal. This mistake was not noticed until the day of planned sampling.

Activities included the scheduled breakup of high-pressure lines and coordination of excavating under those lines all in a quick succession. Once that was completed the high-pressure lines were reconnected and the well was put back online.

**Chad Hensley**

Senior Project Manager  
Vertex Resource Services Inc.  
3101 Boyd Drive,  
Carlsbad, NM 88220

**C 575-200-6167**

**O 575.725.5001**

[www.vertexresource.com](http://www.vertexresource.com)

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Sante Fe Main Office  
Phone: (505) 476-3441

General Information  
Phone: (505) 629-6116

Online Phone Directory  
<https://www.emnrd.nm.gov/ocd/contact-us>

**State of New Mexico**  
**Energy, Minerals and Natural Resources**  
**Oil Conservation Division**  
**1220 S. St Francis Dr.**  
**Santa Fe, NM 87505**

QUESTIONS

Action 545501

**QUESTIONS**

Operator: CIMAREX ENERGY CO. OF COLORADO 6001 Deauville Blvd Midland, TX 79706	OGRID: 162683
	Action Number: 545501
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

<b>Prerequisites</b>	
Incident ID (n#)	nAPP2425876097
Incident Name	NAPP2425876097 RIVERBEND 12-13 FEDERAL COM 20H @ 30-015-49536
Incident Type	Produced Water Release
Incident Status	Remediation Closure Report Received
Incident Well	[30-015-49536] RIVERBEND 12 13 FEDERAL COM #020H

<b>Location of Release Source</b>	
<i>Please answer all the questions in this group.</i>	
Site Name	RIVERBEND 12-13 FEDERAL COM 20H
Date Release Discovered	09/14/2024
Surface Owner	Federal

<b>Incident Details</b>	
<i>Please answer all the questions in this group.</i>	
Incident Type	Produced Water Release
Did this release result in a fire or is the result of a fire	No
Did this release result in any injuries	No
Has this release reached or does it have a reasonable probability of reaching a watercourse	No
Has this release endangered or does it have a reasonable probability of endangering public health	No
Has this release substantially damaged or will it substantially damage property or the environment	No
Is this release of a volume that is or may with reasonable probability be detrimental to fresh water	No

<b>Nature and Volume of Release</b>	
<i>Material(s) released, please answer all that apply below. Any calculations or specific justifications for the volumes provided should be attached to the follow-up C-141 submission.</i>	
Crude Oil Released (bbls) Details	Not answered.
Produced Water Released (bbls) Details	Not answered.
Is the concentration of chloride in the produced water >10,000 mg/l	Yes
Condensate Released (bbls) Details	Not answered.
Natural Gas Vented (Mcf) Details	Not answered.
Natural Gas Flared (Mcf) Details	Not answered.
Other Released Details	Cause: Human Error   Tank (Any)   Brine Water   Released: 11 BBL   Recovered: 4 BBL   Lost: 7 BBL.
Are there additional details for the questions above (i.e. any answer containing Other, Specify, Unknown, and/or Fire, or any negative lost amounts)	After filling a brine water tank for well work operations, the hose fell out of the tank and onto the well pad. This allowed some of the brine water to syphon out of the tank and onto the pad. An estimated 11 barrels was released onto the well pad and a total of 4 barrels were recovered by a vac truck. An environmental consultant will be contacted to remediate the impacted area in the coming weeks. Released: 11 barrels brine water Recovered: 4 barrels

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QUESTIONS, Page 2

Action 545501

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Nature and Volume of Release (continued)</b>	
Is this a gas only submission (i.e. only significant Mcf values reported)	<b>No, according to supplied volumes this does not appear to be a "gas only" report.</b>
Was this a major release as defined by Subsection A of 19.15.29.7 NMAC	<b>No</b>
Reasons why this would be considered a submission for a notification of a major release	<i>Unavailable.</i>

*With the implementation of the 19.15.27 NMAC (05/25/2021), venting and/or flaring of natural gas (i.e. gas only) are to be submitted on the C-129 form.*

**Initial Response**

*The responsible party must undertake the following actions immediately unless they could create a safety hazard that would result in injury.*

The source of the release has been stopped	<b>True</b>
The impacted area has been secured to protect human health and the environment	<b>True</b>
Released materials have been contained via the use of berms or dikes, absorbent pads, or other containment devices	<b>True</b>
All free liquids and recoverable materials have been removed and managed appropriately	<b>True</b>
If all the actions described above have not been undertaken, explain why	<i>Not answered.</i>

*Per Paragraph (4) of Subsection B of 19.15.29.8 NMAC the responsible party may commence remediation immediately after discovery of a release. If remediation has begun, please prepare and attach a narrative of actions to date in the follow-up C-141 submission. If remedial efforts have been successfully completed or if the release occurred within a lined containment area (see Subparagraph (a) of Paragraph (5) of Subsection A of 19.15.29.11 NMAC), please prepare and attach all information needed for closure evaluation in the follow-up C-141 submission.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 01/22/2026
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QUESTIONS, Page 3

Action 545501

**QUESTIONS (continued)**

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	Action Number: 545501
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**QUESTIONS**

**Site Characterization**

Please answer all the questions in this group (only required when seeking remediation plan approval and beyond). This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

What is the shallowest depth to groundwater beneath the area affected by the release in feet below ground surface (ft bgs)	Between 26 and 50 (ft.)
What method was used to determine the depth to ground water	NM OSE iWaters Database Search
Did this release impact groundwater or surface water	No
<b>What is the minimum distance, between the closest lateral extents of the release and the following surface areas:</b>	
A continuously flowing watercourse or any other significant watercourse	Between 1 and 5 (mi.)
Any lakebed, sinkhole, or playa lake (measured from the ordinary high-water mark)	Between 1 and 5 (mi.)
An occupied permanent residence, school, hospital, institution, or church	Greater than 5 (mi.)
A spring or a private domestic fresh water well used by less than five households for domestic or stock watering purposes	Greater than 5 (mi.)
Any other fresh water well or spring	Between 1 and 5 (mi.)
Incorporated municipal boundaries or a defined municipal fresh water well field	Greater than 5 (mi.)
A wetland	Between 1 and 5 (mi.)
A subsurface mine	Greater than 5 (mi.)
An (non-karst) unstable area	Zero feet, overlying, or within area
Categorize the risk of this well / site being in a karst geology	High
A 100-year floodplain	Between 1 and 5 (mi.)
Did the release impact areas not on an exploration, development, production, or storage site	No

**Remediation Plan**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

Requesting a remediation plan approval with this submission	Yes
<i>Attach a comprehensive report demonstrating the lateral and vertical extents of soil contamination associated with the release have been determined, pursuant to 19.15.29.11 NMAC and 19.15.29.13 NMAC.</i>	
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No

**Soil Contamination Sampling:** (Provide the highest observable value for each, in milligrams per kilograms.)

Chloride (EPA 300.0 or SM4500 Cl B)	8280
TPH (GRO+DRO+MRO) (EPA SW-846 Method 8015M)	129
GRO+DRO (EPA SW-846 Method 8015M)	69.7
BTEX (EPA SW-846 Method 8021B or 8260B)	0
Benzene (EPA SW-846 Method 8021B or 8260B)	0

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

On what estimated date will the remediation commence	09/09/2025
On what date will (or did) the final sampling or liner inspection occur	10/24/2025
On what date will (or was) the remediation complete(d)	11/21/2025
What is the estimated surface area (in square feet) that will be reclaimed	0
What is the estimated volume (in cubic yards) that will be reclaimed	0
What is the estimated surface area (in square feet) that will be remediated	7850
What is the estimated volume (in cubic yards) that will be remediated	2325

*These estimated dates and measurements are recognized to be the best guess or calculation at the time of submission and may (be) change(d) over time as more remediation efforts are completed.*

*The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.*

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QUESTIONS, Page 4

Action 545501

**QUESTIONS (continued)**

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	Action Number: 545501
	Action Type: [C-141] Remediation Closure Request C-141 (C-141-v-Closure)

**QUESTIONS**

**Remediation Plan (continued)**

Please answer all the questions that apply or are indicated. This information must be provided to the appropriate district office no later than 90 days after the release discovery date.

**This remediation will (or is expected to) utilize the following processes to remediate / reduce contaminants:**

(Select all answers below that apply.)

(Ex Situ) Excavation and <b>off-site</b> disposal (i.e. dig and haul, hydrovac, etc.)	Yes
Which OCD approved facility will be used for <b>off-site</b> disposal	fEEM0112334510 HALFWAY DISPOSAL AND LANDFILL
<b>OR</b> which OCD approved well (API) will be used for <b>off-site</b> disposal	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, out-of-state	Not answered.
<b>OR</b> is the <b>off-site</b> disposal site, to be used, an NMED facility	No
(Ex Situ) Excavation and <b>on-site</b> remediation (i.e. On-Site Land Farms)	No
(In Situ) Soil Vapor Extraction	No
(In Situ) Chemical processing (i.e. Soil Shredding, Potassium Permanganate, etc.)	No
(In Situ) Biological processing (i.e. Microbes / Fertilizer, etc.)	No
(In Situ) Physical processing (i.e. Soil Washing, Gypsum, Disking, etc.)	No
Ground Water Abatement pursuant to 19.15.30 NMAC	No
OTHER (Non-listed remedial process)	No

Per Subsection B of 19.15.29.11 NMAC unless the site characterization report includes completed efforts at remediation, the report must include a proposed remediation plan in accordance with 19.15.29.12 NMAC, which includes the anticipated timelines for beginning and completing the remediation.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 01/22/2026
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The OCD recognizes that proposed remediation measures may have to be minimally adjusted in accordance with the physical realities encountered during remediation. If the responsible party has any need to significantly deviate from the remediation plan proposed, then it should consult with the division to determine if another remediation plan submission is required.

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QUESTIONS, Page 5

Action 545501

**QUESTIONS (continued)**

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	Action Number: 545501
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**QUESTIONS**

<b>Deferral Requests Only</b>	
<i>Only answer the questions in this group if seeking a deferral upon approval this submission. Each of the following items must be confirmed as part of any request for deferral of remediation.</i>	
Requesting a deferral of the remediation closure due date with the approval of this submission	No

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QUESTIONS, Page 6

Action 545501

**QUESTIONS (continued)**

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**QUESTIONS**

<b>Sampling Event Information</b>	
Last sampling notification (C-141N) recorded	<b>527162</b>
Sampling date pursuant to Subparagraph (a) of Paragraph (1) of Subsection D of 19.15.29.12 NMAC	<b>11/21/2025</b>
What was the (estimated) number of samples that were to be gathered	<b>10</b>
What was the sampling surface area in square feet	<b>1020</b>

<b>Remediation Closure Request</b>	
<i>Only answer the questions in this group if seeking remediation closure for this release because all remediation steps have been completed.</i>	
Requesting a remediation closure approval with this submission	Yes
Have the lateral and vertical extents of contamination been fully delineated	Yes
Was this release entirely contained within a lined containment area	No
All areas reasonably needed for production or subsequent drilling operations have been stabilized, returned to the sites existing grade, and have a soil cover that prevents ponding of water, minimizing dust and erosion	Yes
What was the total surface area (in square feet) remediated	16536
What was the total volume (cubic yards) remediated	4835
All areas not reasonably needed for production or subsequent drilling operations have been reclaimed to contain a minimum of four feet of non-waste contain earthen material with concentrations less than 600 mg/kg chlorides, 100 mg/kg TPH, 50 mg/kg BTEX, and 10 mg/kg Benzene	Yes
What was the total surface area (in square feet) reclaimed	0
What was the total volume (in cubic yards) reclaimed	0
Summarize any additional remediation activities not included by answers (above)	Report is attached

*The responsible party must attach information demonstrating they have complied with all applicable closure requirements and any conditions or directives of the OCD. This demonstration should be in the form of a comprehensive report (in .pdf format) including a scaled site map, sampling diagrams, relevant field notes, photographs of any excavation prior to backfilling, laboratory data including chain of custody documents of final sampling, and a narrative of the remedial activities. Refer to 19.15.29.12 NMAC.*

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to OCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the OCD does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to groundwater, surface water, human health or the environment. In addition, OCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations. The responsible party acknowledges they must substantially restore, reclaim, and re-vegetate the impacted surface area to the conditions that existed prior to the release or their final land use in accordance with 19.15.29.13 NMAC including notification to the OCD when reclamation and re-vegetation are complete.

I hereby agree and sign off to the above statement	Name: Nathaniel Rose Title: EHS Specialists Email: nathaniel.rose@coterra.com Date: 01/22/2026
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QUESTIONS, Page 7

Action 545501

**QUESTIONS (continued)**

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	Action Number: 545501
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**QUESTIONS**

<b>Reclamation Report</b>	
<i>Only answer the questions in this group if all reclamation steps have been completed.</i>	
Requesting a reclamation approval with this submission	No

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CONDITIONS

Action 545501

**CONDITIONS**

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**CONDITIONS**

Created By	Condition	Condition Date
scott.rodgers	This Remediation Closure Report is approved. Areas reasonably needed for production or subsequent drilling operations will need to be reclaimed and revegetated as soon as they are no longer reasonably needed. A report for reclamation and revegetation will need to be submitted and approved prior to this incident receiving the final status of "Restoration Complete".	3/4/2026